ACCESSION NUMBER: 94:22334 CONFSCI
DOCUMENT NUMBER: 94034371
TITLE: Development of a monovalent conjugate vaccine against Neisseria meningitidis group A and the divalent vaccine against groups A and C
AUTHOR: Hronowski, L.J.J.; **Michon, F.**; Huang, C.-H.; Pullen, J.; **Tai, J.**
CORPORATE SOURCE: North American Vaccine, Beltsville, Md., USA
SOURCE: ASM PressP.O. Box 605 Herndon, VA 22070; ph: (703)787-3305, Program and Abstracts Poster Paper No. 174.
Meeting Info.: 934 0336: 33rd Interscience Conference on Antimicrobial Agents and Chemotherapy (9340336). New Orleans, LA (USA). 17-20 October 1993. American Society for Microbiology.
DOCUMENT TYPE: Conference
FILE SEGMENT: DCCP
LANGUAGE: English

L25 ANSWER 23 OF 23 CONFSCI COPYRIGHT 2000 CSA
ACCESSION NUMBER: 94:50218 CONFSCI
DOCUMENT NUMBER: 94-062188
TITLE: Further immunogenicity studies on conjugates of type II and III capsular polysaccharides of group B Streptococcus
AUTHOR: **Michon, F.**; D'Ambra, A.J.; Dong, C.; Lohmar, P.; Fusco, P.; Enriquez, A.; **Tai, J.**
CORPORATE SOURCE: North American Vaccine, Beltsville, MD, USA
SOURCE: American Society for Microbiology, 1325 Massachusetts Ave., NW, Washington, DC 20005, Abstracts. Poster Paper No. E25.
Meeting Info.: 942 5004: 94th Annual Meeting of the American Society for Microbiology (9425004). Las Vegas, NV (USA). 23-27 May 1994. American Association for Microbiology.
DOCUMENT TYPE: Conference
FILE SEGMENT: DCCP
LANGUAGE: English

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13588430 PASCAL No.: 98-0292373

Structural properties of group B streptococcal type III polysaccharide conjugate vaccines that influence immunogenicity and efficacy

Wessels M R; PAOLETTI L C; GUTTORMSEN H K; MICHON F; D'AMBRA A J; KASPER

Channing Laboratory, Brigham and Women Hospital, Department of Medicine, Harvard Medical School, Boston, Massachusetts 02115, United States; Division of Infectious Diseases, Beth Israel Deaconess Medical Center, Department of Medicine, Harvard Medical School, Boston, Massachusetts 02115 , United States; North American Vaccine, Inc., Beltsville, Maryland 20705, United States

Journal: Infection and immunity, 1998, 66 (5) 2186-2192

Language: English

In this study, we tested the hypothesis that the immunogenicity and protective efficacy of polysaccharide-*protein"** conjugate vaccines are influenced by three variables: (i) molecular size of the conjugate, (ii) molecular size of the polysaccharide used for conjugation, and (iii) extent of polysaccharide-to-*protein"** cross-linking. Type III group *B"** *Streptococcus"** *capsular"** *polysaccharide"** was linked by reductive amination at multiple sites to tetanus toxoid to create a polysaccharide-*protein"** conjugate (III-TT). A single lot of III-TT was fractionated into small, medium, and large M SUB r pools. Whereas all three conferred protection in a maternal immunization-neonatal challenge model in mice, the smallest M SUB r conjugate evoked less polysaccharide-specific *immunoglobulin"** G (*IgG"**) than the two larger M SUB r conjugates. To test whether the molecular size of the polysaccharide used for conjugation also affected the immunogenicity of the conjugate, vaccines were synthesized using *capsular"** *polysaccharides"** with M SUB r s of 38,000, 105,000, and 349,000. Polysaccharide-specific *IgG"** responses in mice increased with the M SUB r of the polysaccharides, and protective efficacy was lower for the smallest polysaccharide conjugate compared to the other two vaccines. Immunogenicity testing of a series of vaccines prepared with different degrees of polysaccharide-to-*protein"** cross-linking demonstrated higher polysaccharide-specific *antibody"** responses as the extent of cross-linking increased. However, opsonic activity was greatest in mouse antiserum raised to a moderately cross-linked conjugate, suggesting that some *antibodies"** evoked by highly cross-linked conjugates were directed to a nonprotective epitope. We conclude that conjugate size, polysaccharide size, and degree of polysaccharide-*protein"** cross-linking influence the immunogenicity and protective efficacy of III-TT conjugate vaccines.

Devi, S.
09/207188


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      21jan00 14:37:31 User219783 Session D1553.1

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- key terms

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Set     Items   Description
S1       5344   ((GROUP OR CLASS OR TYPE)(W)A)(3N)STREPTOCOC?
S2        111   S1 AND (CRM197 OR CRM(2W)197 OR (TETAN?? OR CHOLER?? OR DI-
           PHTHER?)(2N)(TOXIN? ? OR TOXOID? ?))
S3         95   S2 AND (VACCIN? OR IMMUNIS? OR IMMUNIZ?)
S4         40   RD (unique items)
S5         92   S3 AND INFECT?
S6         40   RD (unique items)
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 6/3,AB/1     (Item 1 from file: 144)
DIALOG(R)File 144:PASCAL
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  10977772   PASCAL No.: 93-0487254
  Outbreak of pyogenic abscesses after *diphtheria"* and *tetanus"*
*toxoids"* and pertussis *vaccination"*
  SIMON P A; CHEN R T; ELLIOTT J A; SCHWARTZ B
  Cent. disease control, div. field epidemiology, epidemiology program
office, Atlanta GA, USA
  Journal: (The) Pediatric infectious disease journal,  1993, 12 (5)
368-371
  Language: English
```

Nine children who received *diphtheria"* and *tetanus"* *toxoids"* and pertussis *vaccine"* from the same vial at a clinic in Colorado developed pyogenic abscesses at the site of injection. Eight abscesses required surgical drainage and five children were hospitalized. *Group"* *A"* *Streptococcus"* (GAS) was cultured from eight wounds and Staphylococcus aureus was also isolated from four. Epidemiologic investigation revealed that within the hour of the first child's *vaccination"*, three children had been diagnosed in the clinic with GAS pharyngitis. GAS recovered from repeat throat swabs from two of these children and the eight case-isolates were all serotype M-12, T-12 and had identical immunoblot patterns on sodium dodecyl sulfate-polyacrylamide gel electrophoresis

6/3,AB/2 (Item 2 from file: 144)
DIALOG(R)File 144:PASCAL

05989703 PASCAL No.: 85-0251185
Outbreaks of *group"* *A"* *streptococcal"* abscesses following *diphtheria"*-*tetanus"* *toxoid"*-pertussis *vaccination"*
STETLER H C; GARBE P L; DWYER D M; FACKLAM R R; ORENSTEIN W A; WEST G R; JOYCE DUDLEY K; BLOCH A B
Center prevention serv., Atlanta GA 30333, USA
Journal: Pediatrics (Evanston), 1985, 75 (2) 299-303
Language: English
Les 2 epidemies ont ete observees apres injection de *vaccin"* provenant de fabricants differents. En outre des *vaccins"* du meme lot n'ont provoque aucun abces. Il s'agirait donc de la contamination d'un flacon unique de 15 doses. Le produit conservateur du *vaccin"* n'evite pas la contamination bacterienne a court terme. La veritable et seule mesure preventive realisable actuellement est de porter beaucoup d'attention au caractere sterile de la technique d'administration du *vaccin"*

6/3,AB/3 (Item 1 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

10449347 GENUINE ARTICLE#: 182MY NUMBER OF REFERENCES: 42
TITLE: Protective immune response against Streptococcus pyogenes in mice after intranasal *vaccination"* with the fibronectin binding protein SfbI
AUTHOR(S): Guzman CA (REPRINT); Talay SR; Molinari G; Medina E; Chhatwal GS
AUTHOR(S) E-MAIL: cag@gbf.de
CORPORATE SOURCE: GBF Natl Res Ctr Biotechnol, Div Microbiol, Mascheroder Weg 1/D-38124 Braunschweig//Germany/ (REPRINT); GBF Natl Res Ctr Biotechnol, Div Microbiol, /D-38124 Braunschweig//Germany/
PUBLICATION TYPE: JOURNAL
PUBLICATION: JOURNAL OF INFECTIOUS DISEASES, 1999, V179, N4 (APR), P901-906

PUBLISHER: UNIV CHICAGO PRESS, 5720 SOUTH WOODLAWN AVE, CHICAGO, IL 60637-1603 USA
ISSN: 0022-1899
LANGUAGE: English DOCUMENT TYPE: ARTICLE
ABSTRACT: Despite the significant impact on human health of Streptococcus pyogenes, an efficacious *vaccine"* has not yet been developed. Here, the potential as a *vaccine"* candidate of a major streptococcal adhesin, the fibronectin-binding protein SfbI, was evaluated. Intranasal *immunization"* of mice with either SfbI alone or coupled to *cholera"* *toxin"* B subunit (CTB) triggered efficient SfbI-specific humoral (mainly IgG) and lung mucosal (14% of total IgA) responses. CTB-*immunized"* control mice were not protected against challenge with S. pyogenes (90%-100% lethality), whereas SfbI-*vaccinated"* animals showed 80% and 90% protection against homologous and heterologous challenge, respectively. Multiple areas of consolidation with diffused cellular infiltrates (macrophages and neutrophils) were observed in lungs from control mice; the histologic structure was preserved in SfbI-*vaccinated"* animals, which occasionally presented focal infiltrates confined to the perivascular, peribronchial, and subpleural areas. These results suggest that SfbI is a promising candidate for inclusion in acellular *vaccines"* against S. pyogenes.
ISSN: 0022-1899

6/3,AB/4 (Item 2 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

08531913 GENUINE ARTICLE#: XD850 NUMBER OF REFERENCES: 88
TITLE: Nasal lymphoid tissue, intranasal *immunization"*, and compartmentalization of the common mucosal immune system
AUTHOR(S): Wu HY (REPRINT); Russell MW
CORPORATE SOURCE: UNIV ALABAMA,DEPT MICROBIOL, BOX 1, 845 19TH ST S/BIRMINGHAM//AL/35294 (REPRINT)
PUBLICATION TYPE: JOURNAL
PUBLICATION: IMMUNOLOGIC RESEARCH, 1997, V16, N2, P187-201
PUBLISHER: HUMANA PRESS INC, 999 RIVERVIEW DRIVE SUITE 208, TOTOWA, NJ 07512
ISSN: 0257-277X
LANGUAGE: English DOCUMENT TYPE: ARTICLE
ABSTRACT: Mucosal application of *vaccines"* with an appropriate adjuvant can induce immune responses at both systemic and mucosal sites, and therefore may prevent not only *infectious"* disease, but also colonization at mucosal surfaces. Intranasal is more effective than intragastric *immunization"* at generating earlier and stronger mucosal immune responses. Nasal lymphoid tissue (NALT) and its local draining lymph nodes may retain long-term immune memory. IgA isotype switching, and the differentiation and maturation of IgA antibody-secreting cells (ASC) may occur before these cells migrate out of NALT, whereas IgG ASC

responses require passage of the cells through draining lymph nodes of the NALT. Knowledge of whether immune memory cells can recirculate to and reside in the inductive sites other than their origin after encountering antigen will be helpful for understanding the compartmentalization of the common mucosal immune system as well as for determining the best route for delivering a mucosal *vaccine"* against a particular pathogen.
ISSN: 0257-277X

6/3,AB/5 (Item 3 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

07271125 GENUINE ARTICLE#: UD443 NUMBER OF REFERENCES: 34
TITLE: MAPPING A CONSERVED CONFORMATIONAL EPITOPE FROM THE M PROTEIN OF *GROUP"* *A"* *STREPTOCOCCI"*
AUTHOR(S): RELF WA; COOPER J; BRANDT ER; HAYMAN WA; ANDERS RF; PRUKSAKORN S ; CURRIE B; SAUL A; GOOD MF (Reprint)
CORPORATE SOURCE: ROYAL BRISBANE HOSP,QUEENSLAND INST MED RES,TROP HLTH PROGRAM,BRAMSTON TERRACE,300 HERSTON RD/BRISBANE/QLD 4029/AUSTRALIA/ (Reprint); ROYAL BRISBANE HOSP,QUEENSLAND INST MED RES,TROP HLTH PROGRAM/BRISBANE/QLD 4029/AUSTRALIA/; ROYAL MELBOURNE HOSP,WALTER & ELIZA HALL INST MED RES/MELBOURNE/VIC 3050/AUSTRALIA/; MENZIES SCH HLTH RES/CASUARINA/NT/AUSTRALIA/
PUBLICATION: PEPTIDE RESEARCH, 1996, V9, N1 (JAN-FEB), P12-20
ISSN: 1040-5704
LANGUAGE: ENGLISH DOCUMENT TYPE: ARTICLE
ABSTRACT: The carboxyl terminus of the M protein of *group"* *A"* *streptococci"* (GAS) is highly conserved and contains epitopes that have been shown to induce opsonic antibodies and protection against GAS *infection"*. This region of the protein can also stimulate T cells, which can react in vitro with heart antigens. Since different segments of the carboxyl terminus may be involved in immunity to GAS and in the pathogenesis of autoimmune disease (rheumatic heart disease), it is important to precisely define critical epitopes. However, the M protein is known to be a coiled coil, and a critical immunodominant antibody-biding epitope within this region (peptide 145, a 20-mer with the sequence LRRDLDASREALL-QVEKALE) is shown here to be conformational. Thus, small synthetic overlapping peptides of 8-12 amino acids in length that span peptide 145 (p145) were unable to capture antibodies present in p145-immune mouse sera or in endemic human sera, even though antibodies raised to these small peptides coupled to *diphtheria"* *toxoid"* cold bind the smaller peptides and, in some cases, p145. A series of mutated peptides in which every residue of p145 was sequentially altered also failed to identify critical residues for antibody binding. We thus devised a strategy to produce chimeric peptides in which small peptides copying the M protein sequence were displayed within a larger 28-mer peptide derived from the sequence of

the GCN4 leucine zipper DNA binding protein of yeast. A 12-amino-acid window of the p145 sequence was inserted into the GCN4 peptide in such a way as to preserve any potential helical structure. The window was moved along one residue at a time to give a series of peptides representing p145. Circular dichroism demonstrated that these larger chimeric peptides and p145, but not a shorter 12-mer peptide, displayed alpha-helical potential in 50% trifluoroethanol. Certain chimeric peptides efficiently captured antibodies specific for p145 and thus enabled us to map the minimal antibody-binding sequence, RRDL-DASREAKK, referred to as J(1)2. The chimeric peptide containing this sequence, referred to as J2, was able to inhibit opsonization of GAS by human antisera containing anti-peptide 145 antibodies. The T-cell response from p145-*immunized"* responder B10.BR mice to J2 and J(1)2 was much lower than the response to p145 and mapped to a different peptide.
ISSN: 1040-5704

6/3,AB/6 (Item 4 from file: 440)

03423261 GENUINE ARTICLE#: HB535 NUMBER OF REFERENCES: 28
TITLE: EPITOPES OF *GROUP"*-*A"* *STREPTOCOCCAL"* M-PROTEIN THAT EVOKE CROSS-PROTECTIVE LOCAL IMMUNE RESPONSES
AUTHOR(S): BRONZE MS; COURTNEY HS; DALE JB
CORPORATE SOURCE: DEPT VET AFFAIRS MED CTR,1030 JEFFERSON AVE/MEMPHIS//TN/38104 (Reprint); UNIV TENNESSEE CTR HLTH SCI,DEPT MED/MEMPHIS//TN/38104
PUBLICATION: JOURNAL OF IMMUNOLOGY, 1992, V148, N3 (FEB 1), P888-893
LANGUAGE: ENGLISH DOCUMENT TYPE: ARTICLE
ABSTRACT: The present studies were undertaken to identify conserved epitopes of *group"* *A"* *streptococcal"* M proteins that evoke cross-protective mucosal immune responses. Two synthetic peptides copying conserved regions of type 5 M protein, designated SM5(235-264)C and SM5(265-291)C, were covalently linked to carrier molecules and their immunogenicity was tested in laboratory animals. Rabbit antisera against both peptides cross-reacted with multiple serotypes of *group"* *A"* *streptococci"*, indicating that the peptides contained broadly cross-reactive, surface exposed M protein epitopes. Serum antipeptide antibodies adsorbed to the surface of heterologous type 24 streptococci passively protected mice against intranasal challenge *infections"*. Mice that were actively *immunized"* intranasally with each synthetic peptide covalently linked to the B subunit of *cholera"* *toxin"* were protected against colonization and death after intranasal challenge *infections"* with type 24 streptococci in the absence of serum opsonic antibodies. These data confirm and extend previous observations that conserved M protein epitopes evoke cross-protective local immunity and may serve as the basis for broadly cross-protective M protein *vaccines"*.

Searcher : Shears 308-4994

6/3,AB/7 (Item 1 from file: 348)
DIALOG(R)File 348:European Patents

01070801
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Antigenic conjugates of conserved lipopolysaccharides of gram negative bacteria
Antigenkonjugate von konservierten Lipopolysacchariden aus gram-negativen Bakterien
Conjugues antigeniques de lipopolysaccharides de bacteries gram-negatives

PATENT ASSIGNEE:
American Cyanamid Company, (212598), Five Giralda Farms, Madison, New Jersey 07940-0874, (US), (Applicant designated States: all)
INVENTOR:
Arumugham, Rasappa G., 15 Elatia Circle Pittsford, New York 14534, (US)
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LEGAL REPRESENTATIVE:
Wileman, David Francis, Dr. et al (46002), c/o Wyeth Laboratories Huntercombe Lane South, Taplow Maidenhead Berkshire SL6 OPH, (GB)
PATENT (CC, No, Kind, Date): EP 941738 A1 990915 (Basic)
APPLICATION (CC, No, Date): EP 99301747 990309;
PRIORITY (CC, No, Date): US 37529 980310
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: A61K-039/385; A61K-039/02; A61K-39:095

ABSTRACT EP 941738 A1
Antigenic conjugates are provided which comprise a carrier protein covalently bonded to the conserved portion of a lipopolysaccharide of a gram negative bacteria, wherein said conserved portion of the lipopolysaccharide comprises the inner core and lipid A portions of said lipopolysaccharide, said conjugate eliciting a cross reactive immune response against heterologous strains of said gram negative bacteria.
ABSTRACT WORD COUNT: 58
NOTE:
Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language Update Word Count
CLAIMS A (English) 9937 707
SPEC A (English) 9937 6253
Searcher : Shears 308-4994

Total word count - document A	6960
Total word count - document B	0
Total word count - documents A + B	6960

6/3,AB/8 (Item 2 from file: 348)
DIALOG(R)File 348:European Patents

01025001
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
DnaG DNA primase of Streptococcus pneumoniae
DnaG DNS Primase vom Streptococcus pneumoniae
DnaG DNA primase de Streptococcus pneumoniae
PATENT ASSIGNEE:
SMITHKLINE BECKMAN CORPORATION, (201242), One Franklin Plaza P O Box 7929 , Philadelphia Pennsylvania 19103, (US), (Applicant designated States: all)
INVENTOR:
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Lenox, Anna Lisa, SmithKline Beecham Pharm., 1250 South Collegeville Road, PO Box 5089, Collegeville, PA 19426-0989, (US)
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Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 915161 A2 990512 (Basic)
EP 915161 A3 990825
APPLICATION (CC, No, Date): EP 98203422 981009;
PRIORITY (CC, No, Date): US 70912 P 971021
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/12; C12N-001/21; C07K-016/40; A61K-039/09; A61K-048/00; C12Q-001/34; C12Q-001/68; G06F-017/30

ABSTRACT EP 915161 A2
The invention provides dnaG polypeptides and polynucleotides encoding dnaG polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing dnaG polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9922	1613
SPEC A	(English)	9922	18252
Total word count - document A			19865
Total word count - document B			0
Total word count - documents A + B			19865

6/3,AB/9 (Item 3 from file: 348)
DIALOG(R)File 348:European Patents

01021466
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Chorismate synthase
Chorismat Synthase
Chorismate synthase
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
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Ingraham, Karen A, Smithkline Beecham Pharm., 1250 South Collegeville Road, PO Box 5089, Collegeville, PA 19426-0989, (US)
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LEGAL REPRESENTATIVE:
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PATENT (CC, No, Kind, Date): EP 913480 A2 990506 (Basic)
APPLICATION (CC, No, Date): EP 98203627 981026;
PRIORITY (CC, No, Date): US 64039 P 971103
Searcher : Shears 308-4994

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/60; C12N-009/88; C12N-001/21; C12N-015/74; A61K-038/51; C07K-016/40; C12Q-001/68; G01N-033/68; G06F-017/30;

ABSTRACT EP 913480 A2
The invention provides aroC polypeptides and polynucleotides encoding aroC polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing aroC polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9918	1708
SPEC A	(English)	9918	20062
Total word count - document A			21770
Total word count - document B			0
Total word count - documents A + B			21770

6/3,AB/10 (Item 4 from file: 348)
DIALOG(R)File 348:European Patents

01017988
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
MurB gene from Streptococcus pneumoniae
MurB Gen aus Streptococcus pneumoniae
Gene MurB de Streptococcus pneumoniae
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201243), One Franklin Plaza, P.O. Box 7929, Philadelphia Pennsylvania 19101, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267442), New Horizons Court, Brentford, Middlesex TW8 9BD, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
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Jaworski, Deborah Dee, SmithKline Beecham Pharm., 1250 South Collegeville Road, Po. Box 5089 Collegeville PA 19426-0989, (US)
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Holmes, David John, SmithKline Beecham Pharm., 1250 South Collegeville Road, Po. Box 5089 Collegeville PA 19426-0989, (US)
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PATENT (CC, No, Kind, Date): EP 911403 A2 990428 (Basic)
APPLICATION (CC, No, Date): EP 98306699 980821;
PRIORITY (CC, No, Date): US 57352 P 970825; US 78691 980514
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/315; C12P-021/00; C07K-016/12; A61K-038/16; C12Q-001/68;

ABSTRACT EP 911403 A2
The invention provides MurB polypeptides and polynucleotides encoding MurB polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing MurB polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9917	1410
SPEC A	(English)	9917	20071
Total word count - document A			21481
Total word count - document B			0
Total word count - documents A + B			21481

6/3,AB/11 (Item 5 from file: 348)
DIALOG(R)File 348:European Patents

01011137
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
ABC transporter
ABC Transportprotein und Gen
Searcher : Shears 308-4994

Polypeptide et gene encodant un transporteur ABC
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Warren, Richard Lloyd, SmithKline Pharmaceuticals, 1250 South Collegeville Road, PO Box 5089, Collegeville, PA 19426-0989, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 908516 A1 990414 (Basic)
APPLICATION (CC, No, Date): EP 98308038 981002;
PRIORITY (CC, No, Date): US 946348 971007
DESIGNATED STATES: BE; CH; DE; DK; FR; GB; IT; LI; NL
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/31; C07K-016/12; C12Q-001/68; G01N-001/00;

ABSTRACT EP 908516 A1
The invention provides ABC transporter polypeptides and polynucleotides encoding ABC transporter polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing ABC transporter polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 36

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9915	649
SPEC A	(English)	9915	18500
Total word count - document A			19149
Total word count - document B			0
Total word count - documents A + B			19149

6/3,AB/12 (Item 6 from file: 348)
DIALOG(R)File 348:European Patents

01004351
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
MurF polynucleotides and polypeptides from Staphylococcus
MurF Polynukleotiden und Polypeptiden aus Staphylococcus
Polynucleotides and polypeptides Murf de Staphylococcus
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (Applicant designated States: all)

Searcher : Shears 308-4994

INVENTOR:
Wallis, Nicola G. Smithkline Beecham Pharm., 1250 South Collegeville Road, P.O.Box 5089, Collegeville, Pennsylvania 19426-0989, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 905247 A2 990331 (Basic)
EP 905247 A3 991020
APPLICATION (CC, No, Date): EP 98307550 980917;
PRIORITY (CC, No, Date): US 60682 P 970925
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C12N-015/52; C12N-009/00; C12N-001/21; C07K-016/40; C12Q-001/68; C12Q-001/527

ABSTRACT EP 905247 A2
The invention provides MurF polypeptides and polynucleotides encoding MurF polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing MurF polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9913	862
SPEC A	(English)	9913	19004
Total word count - document A			19866
Total word count - document B			0
Total word count - documents A + B			19866

6/3,AB/13 (Item 7 from file: 348)
DIALOG(R)File 348:European Patents

00997036
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Nucleic acid encoding Streptococcus pneumoniae response regulator
Nukleinsaure kodierend fur Streptococcus pneumoniae Respons-Regulator
Acide nucleique codant pour un regulateur de response de Streptococcus pneumoniae
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Wallis, Nicola, SmithKline Beecham Pharm., 1250 South Collegeville Road,

PO Box 5089, Collegeville, Pennsylvania 19426-0989, (US)
Ingraham, Karen, SmithKline Beecham Pharm., 1250 South Collegeville Road, PO Box 5089, Collegeville, Pennsylvania 19426-0989, (US)
Holmes, David, SmithKline Beecham Pharm., 1250 South Collegeville Road, PO Box 5089, Collegeville, Pennsylvania 19426-0989, (US)
Zalacain, Magdalena, SmithKline Beecham Pharm., 1250 South Collegeville Road, PO Box 5089, Collegeville, Pennsylvania 19426-0989, (US)
Throup, John, SmithKline Beecham Pharm., 1250 South Collegeville Road, PO Box 5089, Collegeville, Pennsylvania 19426-0989, (US)
Biswas, Sanjoy, SmithKline Beecham Pharm., 1250 South Collegeville Road, PO Box 5089, Collegeville, Pennsylvania 19426-0989, (US)
Ge, Yigong, SmithKline Beecham Pharm., 1250 South Collegeville Road, PO Box 5089, Collegeville, Pennsylvania 19426-0989, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 900846 A2 990310 (Basic)
APPLICATION (CC, No, Date): EP 98307054 980902;
PRIORITY (CC, No, Date): US 60714 P 970909
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/315; C07K-016/12; A61K-039/085; C12Q-001/68; G01N-033/50;

ABSTRACT EP 900846 A2
The invention provides Response regulator polypeptides and polynucleotides encoding Response regulator polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing Response regulator polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 36

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9910	862
SPEC A	(English)	9910	21166
Total word count - document A			22028
Total word count - document B			0
Total word count - documents A + B			22028

6/3,AB/14 (Item 8 from file: 348)
DIALOG(R)File 348:European Patents

00995425
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
DextranaseB gene from Streptococcus pneumoniae
Searcher : Shears 308-4994

DextranaseB Gen aus Streptococcus pneumoniae
Gene DextranaseB de Streptococcus pneumoniae
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Burnham, Martin K.R., SmithKline Beecham Pharm., 1250 South Collegeville Road, Po. Box 5089 Collegeville, Pa 19426-0989, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 899329 A2 990303 (Basic)
APPLICATION (CC, No, Date): EP 98306698 980821;
PRIORITY (CC, No, Date): US 57876 P 970902
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-009/46; C07K-014/315; C07K-016/40; C12N-015/55; C12Q-001/68; G01N-033/50; A61K-038/46; C12P-021/00;

ABSTRACT EP 899329 A2
The invention provides dexB polypeptides and polynucleotides encoding dexB polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing dexB polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9909	1617
SPEC A	(English)	9909	18211
Total word count - document A			19828
Total word count - document B			0
Total word count - documents A + B			19828

6/3,AB/15 (Item 9 from file: 348)
DIALOG(R)File 348:European Patents

00995306
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
FtsZ polypeptides from Streptococcus pneumoniae
FtsZ Polypeptide aus Streptococcus pneumoniae
Polypeptides FtsZ de Streptococcus pneumoniae
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated

states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Fueyo, Joanna Lynn, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Lonetto, Michael A., SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 899334 A2 990303 (Basic)
APPLICATION (CC, No, Date): EP 98306077 980730;
PRIORITY (CC, No, Date): US 55720 P 970812
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/315; C07K-016/12; A61K-039/09; C12Q-001/68;

ABSTRACT EP 899334 A2
The invention provides ftsZ polypeptides and polynucleotides encoding ftsZ polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing ftsZ polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9909	1894
SPEC A	(English)	9909	18718
Total word count - document A			20612
Total word count - document B			0
Total word count - documents A + B			20612

6/3,AB/16 (Item 10 from file: 348)
DIALOG(R)File 348:European Patents

00992440
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
MraY transferase
MraY transferase
MraY transferase
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states:

AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Lonetto, Michael Arthur, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Fueyo, Joanna Lynn, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Jaworski, Deborah Dee, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Wang, Min, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Traini, Christopher Michael, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Kosmatka, Anna Lisa, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 897007 A2 990217 (Basic)
APPLICATION (CC, No, Date): EP 98304635 980611;
PRIORITY (CC, No, Date): US 55467 P 970812; US 61156 980416
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/10; C07K-016/40; A61K-038/45; C12Q-001/68; G01N-033/68; G06F-017/30;

ABSTRACT EP 897007 A2
The invention provides mraY polypeptides and polynucleotides encoding mraY polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing mraY polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9907	1898
SPEC A	(English)	9907	18525
Total word count - document A			20423
Total word count - document B			0
Total word count - documents A + B			20423

6/3,AB/17 (Item 11 from file: 348)
DIALOG(R)File 348:European Patents

00985859
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Response regulator
Antwort-Regulator
Searcher : Shears 308-4994

Regulateur de reponses
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (Applicant designated States: all)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (Applicant designated States: all)
INVENTOR:
Zalacain, Magdalena, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Biswas, Sanjoy, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Kosmatka, Anns Lisa, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Shilling, Lisa Kathleen, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Wallis, Nicola Gail, SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
Throup, John, SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 892057 A2 990120 (Basic)
EP 892057 A3 990901
APPLICATION (CC, No, Date): EP 98305517 980710;
PRIORITY (CC, No, Date): US 53238 P 970718
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/315; C07K-016/12; A61K-039/09; A61K-048/00; C12Q-001/68; G01N-033/569; C12Q-001/14; C12N-015/63; C12N-001/21; G06F-017/30

ABSTRACT EP 892057 A2
The invention provides Response regulator polypeptides and polynucleotides encoding Response regulator polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing Response regulator polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 36

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9903	1899
SPEC A	(English)	9903	20644
Total word count - document A			22543
Total word count - document B			0

Searcher : Shears 308-4994

Total word count - documents A + B 22543

6/3,AB/18 (Item 12 from file: 348)
DIALOG(R)File 348:European Patents

00985854
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Histidine kinase
Histidine Kinase
Histidine kinase
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Wallis, Nicola G., SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
Throup, John , SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 892063 A2 990120 (Basic)
APPLICATION (CC, No, Date): EP 98305498 980710;
PRIORITY (CC, No, Date): US 53127 P 970718
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/12; C12N-015/70; C07K-014/315; C07K-016/12; C12P-021/02; A61K-039/09; A61K-048/00; G06F-017/30; G06F-017/50;

ABSTRACT EP 892063 A2
The invention provides histidine kinase polypeptides and polynucleotides encoding histidine kinase polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing histidine kinase polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 36

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language Update Word Count
CLAIMS A (English) 9903 1900
SPEC A (English) 9903 19466
Searcher : Shears 308-4994

Total word count - document A	21366
Total word count - document B	0
Total word count - documents A + B	21366

6/3,AB/19 (Item 13 from file: 348)
DIALOG(R)File 348:European Patents

00985801
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
GidB polypeptides from Staphylococcus aureus
GidB-Polypeptide aus Staphylococcus aureus
Polypeptides GidB de Staphylococcus aureus
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Palmer, Leslie Marie, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Kallender, Howard, SmitKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
Burnham, Martin K.R., SmitKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
Ward, Judy, SmitKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 892055 A2 990120 (Basic)
APPLICATION (CC, No, Date): EP 98305175 980630;
PRIORITY (CC, No, Date): US 886638 970701; US 97072 980612
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/31; C07K-016/12; A61K-048/00; A61K-031/70; C12Q-001/68; G01N-033/50; C12N-001/21;

ABSTRACT EP 892055 A2
The invention provides gidB polypeptides and polynucleotides encoding gidB polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing gidB polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
Searcher : Shears 308-4994

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9903	1897
SPEC A	(English)	9903	20636
Total word count - document A			22533
Total word count - document B			0
Total word count - documents A + B			22533

6/3,AB/20 (Item 14 from file: 348)
DIALOG(R)File 348:European Patents

00983711
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
MurA gene from Staphylococcus aureus encoding DP-N-Acetylglucosamine enolpyruvyl transferase
MurA Gen vom Staphylococcus aureus das fur DP-N-Acetylglucosamine enolpyruvyl transferase kodiert
Le gene MurA de Staphylococcus aureus codant pour le DP-N-Acetylglucosamine enolpyruvyl transferase
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (Applicant designated States: all)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (Applicant designated States: all)
INVENTOR:
Wallis, Nicola G., SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 890644 A2 990113 (Basic)
EP 890644 A3 990929
APPLICATION (CC, No, Date): EP 98305253 980701;
PRIORITY (CC, No, Date): US 52214 P 970710
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/10; C12N-005/10; C07K-016/40; C12Q-001/68; G01N-033/53; A61K-038/43; A61K-048/00

ABSTRACT EP 890644 A2
The invention provides MurA polypeptides and polynucleotides encoding MurA polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing MurA polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9902	1899
SPEC A	(English)	9902	19131
Total word count - document A			21030
Total word count - document B			0
Total word count - documents A + B			21030

6/3,AB/21 (Item 15 from file: 348)
DIALOG(R)File 348:European Patents

00981687
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Streptococcus pneumoniae gidA2 polynucleotides and polypeptides
Streptococcus pneumoniae gidA2 Polynucleotide und Polypeptide
Streptococcus pneumoniae gidA2 polynucleotides et polypeptides
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Palmer, Leslie Marie, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Fedon, Jason Craig, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Lenox, Anna Lisa, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Kallender, Howard, SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 889132 A2 990107 (Basic)
APPLICATION (CC, No, Date): EP 98305208 980630;
PRIORITY (CC, No, Date): US 51378 P 970701
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/315; C07K-016/12; C12Q-001/68; G01N-033/566; C12N-005/10;

ABSTRACT EP 889132 A2
The invention provides gidA2 polypeptides and polynucleotides encoding

gidA2 polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing gidA2 polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9901	1898
SPEC A	(English)	9901	20435
Total word count - document A			22333
Total word count - document B			0
Total word count - documents A + B			22333

6/3,AB/22 (Item 16 from file: 348)
DIALOG(R)File 348:European Patents

00981684
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Staphylococcus aureus gidA2 polynucleotides and polypeptides
Staphylococcus aureas gidA2 Polynukleotide und Polypeptide
Staphylococcus aureus gidA2 polynucleotides et polypeptides
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Palmer, Leslie Marie, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Lenox, Anna Lisa, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Mooney, Jeffrey L., SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Debouck, Christine M., SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Zhong, Yi Yi, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Kallender, Howard, SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
Burnham, Martin, SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)

Searcher : Shears 308-4994

PATENT (CC, No, Kind, Date): EP 889131 A2 990107 (Basic)
APPLICATION (CC, No, Date): EP 98305203 980630;
PRIORITY (CC, No, Date): US 51380 P 970701
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/31; C07K-016/12; C12Q-001/68; G01N-033/566; C12N-005/10;

ABSTRACT EP 889131 A2

The invention provides gidA2 polypeptides and polynucleotides encoding gidA2 polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing gidA2 polypeptides to screen for antibacterial compounds.

ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9901	1898
SPEC A	(English)	9901	20516
Total word count - document A			22414
Total word count - document B			0
Total word count - documents A + B			22414

6/3,AB/23 (Item 17 from file: 348)
DIALOG(R)File 348:European Patents

00981670
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
GidA1 polypeptides from Staphylococcus aureus
GidA1 polypeptiden aus Staphylococcus aureus
GidA1 polypeptides de staphylococcus aureus
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Palmer, Leslie Marie, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Lenox, Anna Lisa, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Kallender, Howard, SmithKline Beecham PLC, Two New Horizons, Court, Brentford, Middlesex TW8 9EP, (GB)
Burnham, Martin, SmithKline Beecham PLC, Two New Horizons, Court,

Brentford, Middlesex TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 889129 A2 990107 (Basic)
APPLICATION (CC, No, Date): EP 98305180 980630;
PRIORITY (CC, No, Date): US 52758 P 970701
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/31; C07K-016/12; C12Q-001/68; G01N-033/68; A61K-048/00; G06F-017/30;

ABSTRACT EP 889129 A2
The invention provides gidA1 polypeptides and polynucleotides encoding gidA1 polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing gidA1 polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9901	1898
SPEC A	(English)	9901	20401
Total word count - document A			22299
Total word count - document B			0
Total word count - documents A + B			22299

6/3,AB/24 (Item 18 from file: 348)
DIALOG(R)File 348:European Patents

00981669
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
midA1 polypeptides from Streptococcus pneumoniae
GidA1 Polypeptiden aus Streptococcus Pneumoniae
Polypeptides GidA1 de streptococcus pneumoniae
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Palmer, Leslie Marie, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Fedon, Jason C., SmithKline Beecham Pharm., 709 Swedeland Road, King of

Prussia, Pennsylvania 19406, (US)
Lenox, Anna Lisa, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Wang, Min, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Jaworski, Deborah D., SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Kallender, Howard, SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
Burnham, Martin, SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 889128 A2 990107 (Basic)
APPLICATION (CC, No, Date): EP 98305174 980630;
PRIORITY (CC, No, Date): US 51379 P 970701
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/315; C07K-016/12; C12Q-001/68; G01N-033/68; A61K-048/00; G06F-017/30;

ABSTRACT EP 889128 A2
The invention provides gidA1 polypeptides and polynucleotides encoding gidA1 polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing gidA1 polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9901	1898
SPEC A	(English)	9901	20564
Total word count - document A			22462
Total word count - document B			0
Total word count - documents A + B			22462

6/3,AB/25 (Item 19 from file: 348)
DIALOG(R)File 348:European Patents

00981617
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
MurC gene of Staphylococcus aureus coding for UDP-N-acetylmuramate:L-alanine Ligase
MurC Gen aus Staphylococcus aureus kodierend fur UDP-N-Acetylmuramat:L-Alanine Ligase
Searcher : Shears 308-4994

MurC gene de Staphylococcus aureus codant pour UDP-N-acetylmuramate:L-alanine ligase
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Wallis, Nicola G., SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex, TW8 9EP, (GB)
Burnham, Martin K.R., SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex, TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 889123 A2 990107 (Basic)
APPLICATION (CC, No, Date): EP 98305064 980626;
PRIORITY (CC, No, Date): US 52720 P 970703
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-009/00; C12N-015/52; C12Q-001/68; G01N-033/50;

ABSTRACT EP 889123 A2
The invention provides MurC polypeptides and polynucleotides encoding MurC polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing MurC polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9901	1909
SPEC A	(English)	9901	20620
Total word count - document A			22529
Total word count - document B			0
Total word count - documents A + B			22529

6/3,AB/26 (Item 20 from file: 348)
DIALOG(R)File 348:European Patents

00979324
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Histidine kinase
Searcher : Shears 308-4994

Histine Kinase
Histidine kinase
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Wallis, Nicola, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Shilling, Lisa, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Wang, Min, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Jaworski, Deborah, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Ingraham, Karen, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Ge, James, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Holmes, David, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Zalacain, Magdalena, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Throup, John, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Biswas, Sanjoy, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 887413 A2 981230 (Basic)
APPLICATION (CC, No, Date): EP 98304140 980526;
PRIORITY (CC, No, Date): US 48078 P 970530
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/12; C12N-015/70; C07K-014/315; C07K-016/12; C12P-021/02; A61K-039/09; A61K-048/00; G06F-017/30; G06F-017/50;

ABSTRACT EP 887413 A2
The invention provides Histidine Kinase polypeptides and polynucleotides encoding Histidine Kinase polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing Histidine Kinase polypeptides to screen for antibactenal compounds.
ABSTRACT WORD COUNT: 36

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9853	1897
SPEC A	(English)	9853	21031
Total word count - document A			22928
Total word count - document B			0
Total word count - documents A + B			22928

6/3,AB/27 (Item 21 from file: 348)
DIALOG(R)File 348:European Patents

00977358
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Nucleic acid encoding Streptococcus pneumoniae response regulator
Nukleinsaure kodierend fur Streptococcus pneumoniae response-regulator
Acide nucleique codant pour Streptococcus pneumoniae regulateur de response
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (Applicant designated States: all)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (Applicant designated States: all)
INVENTOR:
Zalacain, Magdalena, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Biswas, Sanjoy, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Wallis, Nicola Gail, SmithKline Beecham PLC., Two New Horizons Court, Brentford, Middlesex, TW8 9EP, (GB)
Throup, John, SmithKline Beecham PLC., Two New Horizons Court, Brentford, Middlesex, TW8 9EP, (GB)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 885902 A2 981223 (Basic)
EP 885902 A3 991229
APPLICATION (CC, No, Date): EP 98304775 980617;
PRIORITY (CC, No, Date): US 50332 P 970620
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C07K-014/315; A61K-039/085; C07K-016/12; C12N-015/31; C12Q-001/68; G01N-033/50

ABSTRACT EP 885902 A2

The invention provides response regulator polypeptides and polynucleotides encoding response regulator polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing response regulator polypeptides to screen for antibacterial compounds.

ABSTRACT WORD COUNT: 36

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9852	1899
SPEC A	(English)	9852	20824
Total word count - document A			22723
Total word count - document B			0
Total word count - documents A + B			22723

6/3,AB/28 (Item 22 from file: 348)
DIALOG(R)File 348:European Patents

00972525
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Histidine kinase
Histidine Kinase
Histidine kinase
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Wallis, Nicola, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Zalacain, Magdalena, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Throup, John, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Biswas, Sanjoy, SmithKline Beecham Pharma., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 881297 A2 981202 (Basic)
APPLICATION (CC, No, Date): EP 98304216 980528;
PRIORITY (CC, No, Date): US 48346 P 970530
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;

LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/12; C12N-015/70; C07K-014/315; C07K-016/12; C12P-021/02; A61K-039/09; A61K-048/00; G06F-017/30; G06F-017/50;

ABSTRACT EP 881297 A2
The invention provides Histidine kinase polypeptides and polynucleotides encoding Histidine kinase polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing Histidine kinase polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 36

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9849	1899
SPEC A	(English)	9849	20760
Total word count - document A			22659
Total word count - document B			0
Total word count - documents A + B			22659

6/3,AB/29 (Item 23 from file: 348)
DIALOG(R)File 348:European Patents

00972520
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Histidine kinase
Histidine Kinase
Histidine kinase
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Wallis, Nicola, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Shilling, Lisa, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Wang, Min, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Jaworski, Deborah, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Ingraham, Karen, SmithKline Beecham Pharm., 709 Swedeland Road, King of

Prussia, Pennsylvania 19406, (US)
Ge, James Yigong, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Holmes, David, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Zalacain, Magdalena, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Throup, John, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Biswas, Sanjoy, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Bryant, Alexander, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Marra, Andrea, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 881296 A2 981202 (Basic)
APPLICATION (CC, No, Date): EP 98304211 980528;
PRIORITY (CC, No, Date): US 48339 P 970530
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/12; C12N-015/70; C07K-014/315; C07K-016/12; C12P-021/02; A61K-039/09; A61K-048/00; G06F-017/30; G06F-017/50;

ABSTRACT EP 881296 A2
The invention provides Histidine kinase polypeptides and polynucleotides encoding Histidine kinase polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing Histidine kinase polypeptides to screen for antibactenal compounds.
ABSTRACT WORD COUNT: 36

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9849	1899
SPEC A	(English)	9849	21547
Total word count - document A			23446
Total word count - document B			0
Total word count - documents A + B			23446

6/3,AB/30 (Item 24 from file: 348)
DIALOG(R)File 348:European Patents

Searcher : Shears 308-4994

00972519
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Histidine kinase
Histidine Kinase
Histidine kinase
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Wallis, Nicola, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Ingraham, Karen, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Ge, James Yigong, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Holmes, David, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Zalacain, Magdalena, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Throup, John, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Biswas, Sanjoy, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Bryant, Alexander, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Marra, Andrea, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 881295 A2 981202 (Basic)
APPLICATION (CC, No, Date): EP 98304206 980528;
PRIORITY (CC, No, Date): US 48345 P 970530
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/12; C12N-015/70; C07K-014/315; C07K-016/12; C12P-021/02; A61K-039/09; A61K-048/00; G06F-017/30; G06F-017/50;
ABSTRACT EP 881295 A2

The invention provides Histidine kinase polypeptides and polynucleotides encoding Histidine kinase polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing Histidine kinase polypeptides to screen for antibacterial compounds.

ABSTRACT WORD COUNT: 36

Searcher : Shears 308-4994

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9849	1899
SPEC A	(English)	9849	21519
Total word count - document A			23418
Total word count - document B			0
Total word count - documents A + B			23418

6/3,AB/31 (Item 25 from file: 348)
DIALOG(R)File 348:European Patents

00972488
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Histidine kinase
Histidine Kinase
Kinase de l'histidine
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Wallis, Nicola Gail, SmithKline Beecham Pharma., 709 Swedeland Road, King Of Prussia, Pennsylvania 19406, (US)
Zalacain, Magdalena, SmithKline Beecham Pharma., 709 Swedeland Road, King Of Prussia, Pennsylvania 19406, (US)
Throup, John, SmithKline Beecham Pharma., 709 Swedeland Road, King Of Prussia, Pennsylvania 19406, (US)
Biswas, Sanjoy, SmithKline Beecham Pharma., 709 Swedeland Road, King Of Prussia, Pennsylvania 19406, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 881286 A2 981202 (Basic)
APPLICATION (CC, No, Date): EP 98304138 980526;
PRIORITY (CC, No, Date): US 48347 P 970530
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-009/12; C12N-015/52; C07K-016/12; A61K-038/43; G01N-033/50;

ABSTRACT EP 881286 A2
The invention provides Histidine kinase polypeptides and polynucleotides encoding Histidine kinase polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing Histidine kinase polypeptides to screen for

antibacterial compounds.
ABSTRACT WORD COUNT: 36

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9849	1897
SPEC A	(English)	9849	20785
Total word count - document A			22682
Total word count - document B			0
Total word count - documents A + B			22682

6/3,AB/32 (Item 26 from file: 348)
DIALOG(R)File 348:European Patents

00962904
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
3-Dehydroquinate synthase (aroB)
3-Dehydrochinate Synthase (aroB)
3-dehydroquinate synthase (aroB)
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (Applicant designated States: all)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (Applicant designated States: all)
INVENTOR:
Payne, David, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Chalker, Alison, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
Brown, James, SmithKline Beecham Pharm., 709 Swedeland Road, King of Prussia, Pennsylvania 19406, (US)
LEGAL REPRESENTATIVE:
Connell, Anthony Christopher et al (69941), SmithKline Beecham plc Corporate Intellectual Property, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
PATENT (CC, No, Kind, Date): EP 874053 A2 981028 (Basic)
EP 874053 A3 991124
APPLICATION (CC, No, Date): EP 98303059 980421;
PRIORITY (CC, No, Date): US 44147 P 970422
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C12N-015/60; C12N-015/70; C12N-009/88; C12N-001/21; C12Q-001/68; C07K-016/40; C07H-021/00; A61K-038/51; A61K-048/00; G01N-033/573; G01N-033/68; G06F-017/30
Searcher : Shears 308-4994

ABSTRACT EP 874053 A2
The invention provides 3-dehydroquinate synthase (aroB) polypeptides and polynucleotides encoding 3-dehydroquinate synthase (aroB) polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing 3-dehydroquinate synthase (aroB) polypeptides to screen for antibacterial compounds.
ABSTRACT WORD COUNT: 39

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9844	1417
SPEC A	(English)	9844	18043
Total word count - document A			19460
Total word count - document B			0
Total word count - documents A + B			19460

6/3,AB/33 (Item 27 from file: 348)
DIALOG(R)File 348:European Patents

00955942
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
A group b streptococcus *vaccine"*
Einer Gruppe B Streptococcus Impfstoff
Un *vaccin"* de la groupe B de Streptococcus
PATENT ASSIGNEE:
BRIGHAM AND WOMEN'S HOSPITAL, INC., (1839890), 75 Francis Street, Boston, MA 02115, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Michel, James L., c/o Channing Laboratory, 180 Longwood Avenue, Boston, Massachusetts 02115, (US)
Madoff, Lawrence C., c/o Channing Laboratory, 180 Longwood Avenue, Boston, Massachusetts 02115, (US)
Kasper, Dennis L., c/o Channing Laboratory, 180 Longwood Avenue, Boston, Massachusetts 02115, (US)
LEGAL REPRESENTATIVE:
Ritter, Stephen David et al (35281), Mathys & Squire 100 Grays Inn Road, London WC1X 8AL, (GB)
PATENT (CC, No, Kind, Date): EP 866133 A2 980923 (Basic)
APPLICATION (CC, No, Date): EP 98302087 980319;
PRIORITY (CC, No, Date): US 39353 P 970319
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/70; A61K-039/09; A61K-039/40; C07K-014/315; C12Q-001/68
Searcher : Shears 308-4994

ABSTRACT EP 866133 A2

The invention concerns a *vaccine"* capable of protecting a recipient from *infection"* caused group B Streptococcus. The *vaccine"* comprises polysaccharide-protein moieties or protein moieties without a polysaccharide. The *vaccine"* can contain, inter alia, (a) a group B Streptoccus polysaccharide conjugated to (b) either the N-terminal region of the epsilon antigen, a fragment thereof or their functional derivatives such that the *vaccine"* retains the ability to elicit protective antibodies against group B Streptoccus. The *vaccine"* may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit. Alternatively, the *vaccine"* may contain antigens from different species of Group B Streptococcus. Additionally, the invention concerns a passive *vaccine"* obtained following *immunization"* with either the capsular polysaccharide-protein conjugate or the non-conjugated protein.

ABSTRACT WORD COUNT: 129

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9839	968
SPEC A	(English)	9839	18884
Total word count - document A			19852
Total word count - document B			0
Total word count - documents A + B			19852

6/3,AB/34 (Item 28 from file: 348)

DIALOG(R)File 348:European Patents

00723381

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Mucosal administration of pneumococcal antigens

Mukosale Verabreichung von Pneumokokken-Antigenen

Administration mucosale d'antigenes de pneumococcus

PATENT ASSIGNEE:

UAB RESEARCH FOUNDATION, (978761), 601 Volker Hall, 1670 University Boulevard, UAB Station, Birmingham, AL 35294-009, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Briles, David E., 760 Linwood Road, Birmingham, Alabama 35222, (US)

Wu, Hong-Yin, 2191 Whiting Road, Birmingham, Alabama 35216, (US)

LEGAL REPRESENTATIVE:

Smart, Peter John (43071), W.H. BECK, GREENER & CO 7 Stone Buildings Lincoln's Inn, London WC2A 3SZ, (GB)

PATENT (CC, No, Kind, Date): EP 682950 A1 951122 (Basic)
EP 682950 B1 990721

Searcher : Shears 308-4994

APPLICATION (CC, No, Date): EP 95303365 950519;
PRIORITY (CC, No, Date): US 246636 940520; US 312949 940930
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: A61K-039/09; A61K-009/00; C07K-014/315;

ABSTRACT EP 682950 A1

Mucosal administration, particularly intranasally, of killed whole pneumococci, lysate of pneumococci and isolated and purified PspA, as well as immunogenic fragments thereof, particularly when administered with *cholera"* *toxin"* B subunit, provides protection in animals against pneumococcal colonization and systemic *infection"*. The ability to elicit protection against pneumococcal colonization in a host prevents carriage among *immunized"* individuals, which can lead to elimination of disease from the population as a whole.

ABSTRACT WORD COUNT: 71

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9929	517
CLAIMS B	(German)	9929	485
CLAIMS B	(French)	9929	565
SPEC B	(English)	9929	6739
Total word count - document A			0
Total word count - document B			8306
Total word count - documents A + B			8306

6/3,AB/35 (Item 29 from file: 348)
DIALOG(R)File 348:European Patents

00539213
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Immunoassay for detecting group B streptococcus
Immuntest zum Nachweiss Gruppe-B-Streptokokkus
Essai d'immunologique pour detecter de streptocoque de groupe-B
PATENT ASSIGNEE:
NATIONAL RESEARCH COUNCIL OF CANADA, (487627), 1200 Montreal Road, Ottawa Ontario K1A OR6, (CA), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;MC;NL;PT;SE)
THE BRIGHAM AND WOMEN'S HOSPITAL, INC., (351462), 75 Francis Street, Boston, MA 02115, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;MC;NL;PT;SE)
PRESIDENT AND FELLOWS OF HARVARD COLLEGE, (227955), 17 Quincy Street, Cambri[illegible]e Massachusetts 02138, (US), (applicant designated states: [illegible];DE;DK;ES;FR;GB;GR;IT;LI;LU;MC;NL;PT;SE)

Searcher : Shears 308-4994

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Michon,Francis, 429 Nelson Street, Ottawa,Ontario K1N 7S6, (CA)
Lacroix,Martial, 531 Boulevard des Prairies,Laval, Quebec H7V 1B7, (CA)
Chalifour,Robert, 531 Boulevard des Prairies Building No.10, Laval,Quebec H7V 1B7, (CA)
Feldman,Robert, 10A Old Church Lane, London,NW9 8TB, (GB)
Kasper,Dennis, Channing Laboratories 180 Longwood Aveneu, Boston,Mass.02115, (US)
Pozsgay,Vince, 5112 Parklawn Terrace Apt.201, Rockville Maryland 20852, (US)
LEGAL REPRESENTATIVE:
Pidgeon, Robert John et al (55571), Appleyard Lees & Co. 15 Clare Road, Halifax West Yorkshire HX1 2HY, (GB)
PATENT (CC, No, Kind, Date): EP 510902 A1 921028 (Basic)
EP 510902 B1 960626
APPLICATION (CC, No, Date): EP 92303523 920421;
PRIORITY (CC, No, Date): US 691310 910425
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: G01N-033/569; G01N-033/531; G01N-033/577; C12P-021/08; C07K-016/02; A61K-039/40;

ABSTRACT EP 510902 A1

Immunoadsorbent combinations for the detection and diagnosis of group B streptococcus polysaccharide antigen, comprising an insoluble carrier, a capture agent having an affinity for specifically binding to the trirhamnose epitope of group B streptococcus antigen and having the formula a-L-Rhap(1->2)-a-L-Rhap(1->2)a-Rhap-1- wherein Rhap is rhamnose, and an antigen marker agent having an affinity for binding to monorhamnose epitope of group B streptococcus polysaccharide antigen of formula a-L-Rhap-1- when the group B streptococcus polysaccharide is bound to the carrier. An immunoassay method test kit and polyclonal antibody are also described. (see image in original document)
ABSTRACT WORD COUNT: 95

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	2307
CLAIMS B	(English)	EPAB96	2005
CLAIMS B	(German)	EPAB96	1756
CLAIMS B	(French)	EPAB96	2340
SPEC A	(English)	EPABF1	14055
SPEC B	(English)	EPAB96	13796
Total word count - document A			16363
Total word count - document B			19897
Total word count - documents A + B			36260

6/3,AB/36 (Item 30 from file: 348)
DIALOG(R)File 348:European Patents

00508048
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
IMPROVED *VACCINE"* COMPOSITIONS
VERBESSERTE VAKZINZUSAMMENSETZUNG
VACCIN" AMELIORE
PATENT ASSIGNEE:
NORTH AMERICAN *VACCINE"*, INC., (1439710), 10900 Hamon Street, Montreal, Quebec H3M 3A2, (CA), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;SE
INVENTOR:
PENNEY, Christopher, L., 20 Allenbrooke, Dollard des Ormeaux, Quebec H9A 2S5, (CA)
MICHON, Francis, 429 Nelson Street, Ottawa, Ontario K1N 7S6, (CA)
JENNINGS, Harold, J., 2049 Woodglen Crescent, Gloucester, Ontario K1J 6G6 , (CA)
LEGAL REPRESENTATIVE:
Laufhutte, Dieter, Dr.-Ing. et al (61841), Lorenz-Seidler-Gossel Widenmayerstrasse 23, D-80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 549617 A1 930707 (Basic)
EP 549617 B1 960327
WO 9204915 920402
APPLICATION (CC, No, Date): EP 91915418 910912; WO 91CA326 910912
PRIORITY (CC, No, Date): US 583372 900917
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: A61K-039/39; A61K-039/095; A61K-047/48;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB96	667
CLAIMS B	(German)	EPAB96	576
CLAIMS B	(French)	EPAB96	736
SPEC B	(English)	EPAB96	6136
Total word count - document A			0
Total word count - document B			8115
Total word count - documents A + B			8115

6/3,AB/37 (Item 31 from file: 348)
DIALOG(R)File 348:European Patents

00452597
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Searcher : Shears 308-4994

CONJUGATE *VACCINE"* FOR GROUP B STREPTOCOCCUS
KONJUGATIMPFSTOFF FUR GRUPPE B-STREPTOCOCCUS
VACCIN" CONJUGUE POUR STREPTOCOQUE DU GROUPE B
PATENT ASSIGNEE:
THE GENERAL HOSPITAL CORPORATION, (370400), 55 Fruit Street, Boston, MA 02114, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;IT;LI;LU;NL;SE)
BRIGHAM AND WOMEN'S HOSPITAL, (351461), 75 Francis Street, Boston, Massachusetts 02115, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
MICHEL, James, L., 196 Winslow Road, Waban, MA 02168, (US)
KASPER, Dennis, L., 544 Ward Street, Newton Centre, MA 02159, (US)
AUSUBEL, Frederick, M., 271 Lake Avenue, Newton, MA 02161, (US)
LEGAL REPRESENTATIVE:
Aulmich, Gerhard, Dr. et al (58241), Hoechst AG Patent- und Lizenzabteilung Gebaude K 801, 65926 Frankfurt am Main, (DE)
PATENT (CC, No, Kind, Date): EP 491865 A1 920701 (Basic)
EP 491865 A1 930505
EP 491865 B1 961211
WO 9104049 910404
APPLICATION (CC, No, Date): EP 90915038 900914; WO 90US5251 900914
PRIORITY (CC, No, Date): US 408036 890915
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: A61K-039/09; C12N-015/31; C07K-016/46;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB96	366
CLAIMS B	(German)	EPAB96	382
CLAIMS B	(French)	EPAB96	363
SPEC B	(English)	EPAB96	14514
Total word count - document A			0
Total word count - document B			15625
Total word count - documents A + B			15625

6/3,AB/38 (Item 32 from file: 348)
DIALOG(R)File 348:European Patents

00446327
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
VACCINES" FOR NONTYPABLE HAEMOPHILUS INFLUENZAE.
IMPFSTOFFE GEGEN HAMOPHILUS INFLUENZAE.
VACCINS" CONTRE LES HAEMOPHILUS INFLUENZAE INCLASSIFIABLES.
PATENT ASSIGNEE:

PRAXIS BIOLOGICS, INC., (693521), 30 Corporate Woods, Rochester New York 14623, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
GREEN, Bruce, A., 49 Northfield Gate, Pittsford, NY 14534, (US)
ZLOTNICK, Gary, W., 17 Redwood Drive, Penfield, NY 14526, (US)
LEGAL REPRESENTATIVE:
Allam, Peter Clerk et al (27601), LLOYD WISE, TREGEAR & CO. Norman House 105-109 Strand, London WC2R 0AE, (GB)
PATENT (CC, No, Kind, Date): EP 462210 A1 911227 (Basic)
EP 462210 B1 940907
WO 9010458 900920
APPLICATION (CC, No, Date): EP 90905112 900309; WO 90US1317 900309
PRIORITY (CC, No, Date): US 320971 890309
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: A61K-039/102; C07K-015/04; C12N-015/31; C12N-015/62; C12R-001/21
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	2495
CLAIMS B	(German)	EPBBF1	2364
CLAIMS B	(French)	EPBBF1	2963
SPEC B	(English)	EPBBF1	13186
Total word count - document A			0
Total word count - document B			21008
Total word count - documents A + B			21008

6/3,AB/39 (Item 33 from file: 348)
DIALOG(R)File 348:European Patents

00383491
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
SYNTHETIC PEPTIDES FROM STREPTOCOCCAL M PROTEIN AND *VACCINES"* PREPARED THEREFROM
VOM STREPTOCOCCUS M-PROTEIN ABGELEITETE SYNTHETISCHE PEPTIDE UND DAMIT HERGESTELLTE IMPFSTOFFE
PEPTIDES SYNTHETIQUES PROVENANT DE PROTEINES STREPTOCOCCIQUES M ET *VACCINS"* PREPARES A PARTIR DE CES PEPTIDES
PATENT ASSIGNEE:
THE ROCKEFELLER UNIVERSITY, (315600), 1230 York Avenue, New York, NY 10021, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
FISCHETTI, Vincent, A., 448 Joan Court, West Hempstead, NY 11552, (US)
Searcher : Shears 308-4994

LEGAL REPRESENTATIVE:
Weinhold, Peter, Dr. et al (12857), Patentanwalte Dr. Weinhold, Dannenberg, Dr. Gudel, Schubert Siegfriedstrasse 8, D-80803 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 365646 A1 900502 (Basic)
EP 365646 A1 910313
EP 365646 B1 960508
WO 8909064 891005

APPLICATION (CC, No, Date): EP 89904898 890313; WO 89US1026 890313

PRIORITY (CC, No, Date): US 173380 880325; US 315588 890227

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61K-039/02; C07K-007/06; C07K-007/08; C07K-014/195;

NOTE:
No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB96	266
CLAIMS B	(German)	EPAB96	233
CLAIMS B	(French)	EPAB96	272
SPEC B	(English)	EPAB96	2422
Total word count - document A			0
Total word count - document B			3193
Total word count - documents A + B			3193

6/3,AB/40 (Item 34 from file: 348)
DIALOG(R)File 348:European Patents

00268721
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

A method for culturing bordetella pertussis, a pertussis toxoid and a pertussis *vaccine"*.

Verfahren zum Zuchten von Bordetella-Pertussis, ein Pertussis-Toxoid und ein Pertussis-Impfstoff.

Methode pour cultiver bordetella pertussis, un toxoide de pertussis et un *vaccin"* contre pertussis.

PATENT ASSIGNEE:
The Research Foundation for Microbial Diseases of Osaka University, (884260), 3-1 Yamadaoka, Suita-shi Osaka, (JP), (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:
Chazono, Masashi, 640-46 Muromoto-cho, Kanonzi-shi Kagawa-ken, (JP)
Yoshida, Iwao, 1247-2 Nagareoka-cho, Kanonzi-shi Kagawa-ken, (JP)
Konobe, Takeo, 9-24 Yahata-cho 1-chome, Kanonzi-shi Kagawa-ken, (JP)
Osame, Juichiro, 6784-191 Takuma Matoba Takuma-cho, Mitoyo-gun Kagawa-ken , (JP)

Takaku, Keisuke, 30-11 Senriyama-nishi 4-chome Senriyama, Suita-shi
Osaka-fu, (JP)
LEGAL REPRESENTATIVE:
Lewin, John Harvey et al (33031), Elkington and Fife Prospect House 8
Pembroke Road, Sevenoaks, Kent TN13 1XR, (GB)
PATENT (CC, No, Kind, Date): EP 287732 A1 881026 (Basic)
EP 287732 B1 931020
APPLICATION (CC, No, Date): EP 87306165 870713;
PRIORITY (CC, No, Date): JP 86102360 870424
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: A61K-039/10; C12N-001/20; C12N-001/22;

ABSTRACT EP 287732 A1

There is disclosed a method for culturing Bordetella Pertussis in the presence of a cellulose and/or cellulose derivatives. The present method is useful for obtaining a mixed antigen comprising pertussis toxin and filamentous hemagglutinin in a large amount at low cost. From the antigen, there can be obtained a stable and effective pertussis toxoid to be used for a pertussis *vaccine"*. There is also disclosed a *vaccine"* comprising the pertussis toxoid as an active ingredient and a gelatin and/or gelatin derivatives as a stabilizing agent. The present *vaccine"* is extremely stable and can be stored for a prolonged period of time.
ABSTRACT WORD COUNT: 105

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1850
CLAIMS B	(German)	EPBBF1	860
CLAIMS B	(French)	EPBBF1	978
SPEC B	(English)	EPBBF1	9709
Total word count - document A			0
Total word count - document B			13397
Total word count - documents A + B			13397

? ds; t 11/3,ab/1-16

Set	Items	Description
S7	359	S1 AND (POLYSACCHARID? OR POLY(W)SACCHARID?)
S8	181	S7 AND INFECT?
S9	108	S8 AND (VACCIN? OR IMMUNIS? OR IMMUNIZ?)
S10	61	S9 NOT S5
S11	16	RD (unique items)

>>>No matching display code(s) found in file(s): 60, 65, 113

11/3,AB/1 (Item 1 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

10667609 GENUINE ARTICLE#: 208GZ NUMBER OF REFERENCES: 97
Searcher : Shears 308-4994

TITLE: *Vaccines"* to prevent respiratory *infection"*: opportunities on the near and far horizon
AUTHOR(S): Breiman RF (REPRINT); Butler JC; McInnes PM
CORPORATE SOURCE: Ctr Dis Control & Prevent, Natl Vaccine Program Off, MS A-11,Bldg 1,Room B-72,1600 Clifton Rd/Atlanta//GA/30333 (REPRINT); Ctr Dis Control & Prevent, Natl Vaccine Program Off, /Atlanta//GA/30333
PUBLICATION TYPE: JOURNAL
PUBLICATION: CURRENT OPINION IN INFECTIOUS DISEASES, 1999, V12, N2 (APR), P 145-152
PUBLISHER: LIPPINCOTT WILLIAMS & WILKINS, 227 EAST WASHINGTON SQ, PHILADELPHIA, PA 19106 USA
ISSN: 0951-7375
LANGUAGE: English DOCUMENT TYPE: REVIEW

ABSTRACT: Illnesses caused by respiratory pathogens result in great loss of life, suffering and commitment of resources for treatment. That the suffering and loss of life can be prevented through *immunization"* has already been clearly shown with existing *vaccines"*, such as those for Haemophilus influenzae type b, Streptococcus pneumoniae, and influenza. The emergence of drug-resistant pathogens is making reliance on therapy more expensive and perhaps less successful, accentuating the need to focus on prevention. Although several effective *vaccines"* to prevent respiratory *infections"* currently exist, they are underutilized globally. Improvements in immunogenicity, efficacy, and ease of administration, and lowering the costs of some of the existing *vaccines"* would augment the potential for prevention worldwide. The greatest opportunities for the prevention of respiratory *infections"* will rest with *vaccines"* that will become available in the future. Curr Opin *Infect"* Dis 12:145-152. (C) 1999 Lippincott Williams & Wilkins.
ISSN: 0951-7375

11/3,AB/2 (Item 2 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

09785611 GENUINE ARTICLE#: 113RF NUMBER OF REFERENCES: 32
TITLE: Deletion of repeats in the alpha C protein enhances the pathogenicity of group B streptococci in immune mice
AUTHOR(S): Gravekamp C (REPRINT); Rosner B; Madoff LC
CORPORATE SOURCE: CHANNING LABS,181 LONGWOOD AVE/BOSTON//MA/02115 (REPRINT) ; BRIGHAM & WOMENS HOSP,CHANNING LAB/BOSTON//MA/02115; HARVARD UNIV,SCH MED, BETH ISRAEL DEACONESS MED CTR, DIV INFECT DIS/BOSTON//MA/
PUBLICATION TYPE: JOURNAL
PUBLICATION: INFECTION AND IMMUNITY, 1998, V66, N9 (SEP), P4347-4354
PUBLISHER: AMER SOC MICROBIOLOGY, 1325 MASSACHUSETTS AVENUE, NW, WASHINGTON, DC 20005-4171
ISSN: 0019-9567
LANGUAGE: English DOCUMENT TYPE: ARTICLE

Searcher : Shears 308-4994

ABSTRACT: The alpha C protein is a protective surface-associated antigen of group B streptococci (GBS), The prototype alpha C protein of GBS (strain A909) contains nine identical tandem repeats, each comprising 82 amino acids, flanked by N- and C-terminal domains. Clinical isolates of GBS show variable numbers of repeats with a normal distribution and a median of 9 to 10 repeats. Here, we show that escape mutants of GBS expressing one-repeat alpha C protein were 100-fold more pathogenic than GBS expressing wild-type nine-repeat alpha C protein in neonatal mice whose dams were *immunized"* with antiserum elicited to nine-repeat alpha C protein (50% lethal doses of 1.6 x 10(3) and 1.8 x 10(5), respectively; P = 0.0073). There was no difference in pathogenicity in nonimmune mice, Enzyme-linked immunosorbent assay inhibition showed that nine-repeat but not one-repeat alpha C protein is readily available fair antibody binding on the surface of intact GBS. Immune electron microscopy studies with antibodies to the capsular *polysaccharide"* (CPS) and to the alpha C protein demonstrated localization of the nine-repeat alpha C protein and the CPS at similar distances from the cell wall. The one-repeat alpha C protein was visualized poorly and only in close proximity to the cell wall, thus suggesting that antibody binding to the protein was hindered by CPS or other cell surface components. We concluded that deletion in the repeat region of the alpha C protein enhanced the pathogenicity of GBS in immune mice by (i) loss of a protective (conformational) epitope(s) and (ii) loss of antibody binding to the alpha C protein due to a decrease in antigen size relative to cell wall components and/or CPS.
ISSN: 0019-9567

11/3,AB/3 (Item 3 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

08502802 GENUINE ARTICLE#: XC160 NUMBER OF REFERENCES: 51
TITLE: Streptococcal *infections"* in adults
AUTHOR(S): Harrison LH (REPRINT)
CORPORATE SOURCE: UNIV PITTSBURGH,GRAD SCH PUBL HLTH, DEPT EPIDEMIOL, 521 PARRAN, 130 DESOTO ST/PITTSBURGH//PA/15261 (REPRINT)
PUBLICATION TYPE: JOURNAL
PUBLICATION: CURRENT OPINION IN INFECTIOUS DISEASES, 1997, V10, N2 (APR), P 144-148
PUBLISHER: RAPID SCIENCE PUBLISHERS, 2-6 BOUNDARY ROW, LONDON, ENGLAND SE1 8NH
ISSN: 0951-7375
LANGUAGE: English DOCUMENT TYPE: ARTICLE
ABSTRACT: The proportion of invasive Streptococcus pneumoniae isolates that are drug resistant has reached an alarming level. Circumstantial evidence suggests that antibiotic prescribing patterns are at least in part responsible. The currently available *polysaccharide"* pneumococcal *vaccine"* could prevent a substantial number of these

infections" in adults. Cirrhosis, diabetes, breast cancer, certain neurological conditions, and central venous catheters have been confirmed to be risk factors for group B Streptococcus *infection"*. In one study, almost 5% of adults with invasive group B Streptococcus had recurrent *infection"*. The incidence of and risk factors for invasive *group"* *A"* *Streptococcus"* *infection"* have been further defined.
ISSN: 0951-7375

11/3,AB/4 (Item 4 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

08025463 GENUINE ARTICLE#: VY202 NUMBER OF REFERENCES: 31
TITLE: Inhibition by dextran of Pseudomonas aeruginosa adherence to epithelial cells
AUTHOR(S): Barghouthi S; Guerdoud LM; Speert DP (REPRINT)
CORPORATE SOURCE: RES CTR,ROOM 303, 950 W 28TH AVE/VANCOUVER/BC V5Z 4H4/CANADA/ (REPRINT); UNIV BRITISH COLUMBIA,DEPT PAEDIAT/VANCOUVER/BC/CANADA/; UNIV BRITISH COLUMBIA,DEPT MICROBIOL & IMMUNOL/VANCOUVER/BC/CANADA/; UNIV BRITISH COLUMBIA,CANADIAN BACTERIAL DIS NETWORK/VANCOUVER/BC/CANADA/
PUBLICATION TYPE: JOURNAL
PUBLICATION: AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE, 1996, V154, N6 (DEC), P1788-1793
PUBLISHER: AMER LUNG ASSOC, 1740 BROADWAY, NEW YORK, NY 10019
ISSN: 1073-449X
LANGUAGE: English DOCUMENT TYPE: ARTICLE
ABSTRACT: Adherence of Pseudomonas aeruginosa to cells of the respiratory tract of patients with cystic fibrosis (CF) appears to be a necessary precondition for colonization and *infection"*. To date no effective antiadhesive strategy has been devised for preventing P. aeruginosa *infection"* in these vulnerable hosts. The purpose of these studies was to evaluate the potential for preventing adhesion of P. aeruginosa to epithelial cells with dextran. Dextran (3,000-70,000 MW) inhibited adhesion of P. aeruginosa to buccal and A549 pulmonary epithelial cells; the 3,000 MW compound, at 10 mM was most inhibitory. Adhesion was inhibited optimally at pH 7.4 and was independent of charge; dextran and dextran sulfate were equally inhibitory, Dextran was most inhibitory if added to the epithelial cells before the P. aeruginosa; adhesion was reversed only minimally by adding dextran after the bacteria were bound. The inhibitory effect appeared to be nonspecific because other neutral *polysaccharides"* (glycogen and mannan) were also inhibitory, dextran blocked attachment of other respiratory tract pathogens (Staphylococcus aureus, *Group"* *A"* *streptococcus"*, and Haemophilus influenzae), and because dextran did not bind specifically to bacteria or Po epithelial cells, Dextran is an inexpensive and nontoxic agent and may be useful in patients with CF to prevent, colonization and *infection"* with P. aeruginosa.

Searcher : Shears 308-4994

ISSN: 1073-449X

11/3,AB/5 (Item 1 from file: 348)
DIALOG(R)File 348:European Patents

00929120
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
IgA Fc binding protein from Streptococcus pneumoniae
IgA Fc-bindendes Protein von Streptococcus pneumoniae
Proteine de Streptococcus pneumoniae se liant a la partie Fc des IgA
PATENT ASSIGNEE:
SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (Applicant designated States: all)
SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (Applicant designated States: all)
INVENTOR:
Burnham, Martin K.R., SmithKline Beecham Pharm., 1250 South Collegeville Road, P O Box 5089, Collegeville, Pennsylvania 19426-0989, (US)
LEGAL REPRESENTATIVE:
Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 846766 A2 980610 (Basic)
EP 846766 A3 991124
APPLICATION (CC, No, Date): EP 97307366 970922;
PRIORITY (CC, No, Date): US 27030 P 960924; US 40656 P 970310
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/315; C07K-016/12; A61K-039/09; C12Q-001/68; G01N-033/50; G01N-033/68

ABSTRACT EP 846766 A2
IgAFcBP polypeptides and DNA (RNA) encoding such IgAFcBP and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such IgAFcBP for the treatment of *infection"*, and bacterial *infections"*. Antagonists against such IgAFcBP and their use as a therapeutic to treat *infection"* and bactenal *infections"* are also disclosed. Also disclosed are diagnostic assays for detecting diseases related to the presence of IgAFcBP nucleic acid sequences and the polypeptides in a host. Also disclosed are diagnostic assays for detecting polynucleotides encoding IgAFcBP and for detecting the polypeptide in a host.
ABSTRACT WORD COUNT: 97
NOTE:
Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English
Searcher : Shears 308-4994

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9824	669
SPEC A	(English)	9824	21117
Total word count - document A			21786
Total word count - document B			0
Total word count - documents A + B			21786

11/3,AB/6 (Item 2 from file: 348)
DIALOG(R)File 348:European Patents

00720152
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Vaccine" for nontypable haemophilus influenzae strain.
Vakzine fur einen nicht identifizierbaren Haemophilus influenzae Stamm.
Vaccin" pour une lignee d'haemophilus influenzae non identifiable.
PATENT ASSIGNEE:
AMERICAN CYANAMID COMPANY, (212594), One Cyanamid Plaza, Wayne, NJ 07470-8426, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;NL;PT;SE)
INVENTOR:
Zlotnick, Gary Warren, 21 Woodlyn Way, Penfield, New York 14526, (US)
LEGAL REPRESENTATIVE:
Walters, Philip Bernard William et al (73282), Wyeth Laboratories, Patents & Trade Marks Department, Huntercombe Lane South, Taplow, Maidenhead, Berkshire SL6 0PH, (GB)
PATENT (CC, No, Kind, Date): EP 680765 A1 951108 (Basic)
APPLICATION (CC, No, Date): EP 95302996 950502;
PRIORITY (CC, No, Date): US 210394 940505
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; NL; PT; SE
INTERNATIONAL PATENT CLASS: A61K-039/102;

ABSTRACT EP 680765 A1
The present invention relates to P5 outer membrane protein of the Haemophilus influenzae bacterial strain and antibodies directed to P5 protein. The invention also relates to a method of isolating P5 protein and a *vaccine"* composition for use in the treatment of Haemophilus influenzae *infection"*.
ABSTRACT WORD COUNT: 47

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	595
SPEC A	(English)	EPAB95	3698
Total word count - document A			4293

Searcher : Shears 308-4994

Total word count - document B 0
Total word count - documents A + B 4293

11/3,AB/7 (Item 3 from file: 348)
DIALOG(R)File 348:European Patents

00652191
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
EXTRACTION OF CELL-BOUND PROTEIN FROM BORDETELLA
EXTRAKTION VON ZELLGEBUNDENEM PROTEIN VON BORDETELLA
EXTRACTION DE PROTEINES A LIAISON CELLULAIRE A PARTIR DE BORDETELLA
PATENT ASSIGNEE:
SMITHKLINE BEECHAM BIOLOGICALS S.A., (1311860), 89 rue de l'Institut, 1330 Rixensart, (BE), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
CAPIAU, Carine, SmithKline Beecham Biologicals, (S.A.), 89, rue de l'Institut, B-1330 Rixensart, (BE)
COMBERBACH, Martin, SmithKline Beecham Biologicals, (S.A.), 89, rue de l'Institut, B-1330 Rixensart, (BE)
ROELANTS, Piet, SmithKline Beecham Biologicals, (S.A.), 89, rue de l'Institut, B-1330 Rixensart, (BE)
PETRE, Jean, SmithKline Beecham Biologicals (S.A.), 89, rue de l'Institut , B-1330 Rixensart, (BE)
LEGAL REPRESENTATIVE:
Dalton, Marcus Jonathan William (60102), SmithKline Beecham plc Corporate Intellectual Property, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)
PATENT (CC, No, Kind, Date): EP 687271 A1 951220 (Basic)
EP 687271 B1 981014
WO 9420538 940915
APPLICATION (CC, No, Date): EP 94909902 940228; WO 94EP597 940228
PRIORITY (CC, No, Date): GB 9304399 930304
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C07K-014/195; C07K-014/235; C07K-001/02; A61K-039/10;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9842	249
CLAIMS B	(German)	9842	235
CLAIMS B	(French)	9842	304
SPEC B	(English)	9842	4186

Total word count - document A 0
Searcher : Shears 308-4994

Total word count - document B 4974
Total word count - documents A + B 4974

11/3,AB/8 (Item 4 from file: 348)
DIALOG(R)File 348:European Patents

00597275
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Bacterial antigens, antibodies, *vaccines"* and methods of manufacture.
Bakterielle Antigene, Antikorper, Impfstoffe und Verfahren zur Herstellung.
Antigenes bacteriens, anticorps, *vaccins"* et methodes du preparation.

PATENT ASSIGNEE:
THE BRIGHAM AND WOMEN'S HOSPITAL, INC., (351462), 75 Francis Street, Boston, MA 02115, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
Kasper, Dennis L., 544 Ward Street, Newton Center MA 02159, (US)
Jennings, Harold J., 2049 Woodglen Crescent, Gloucester, Ontario K1J 6G6, (CA)
Levy, Nancy J., 943 Commonwealth Avenue, Newton Center MA 02159, (US)
Wessels, Michael R., 75 Stearns Road, Brookline MA 02146, (US)
LEGAL REPRESENTATIVE:
Allard, Susan Joyce et al (27611), BOULT, WADE & TENNANT 27 Furnival Street, London EC4A 1PQ, (GB)
PATENT (CC, No, Kind, Date): EP 577224 A1 940105 (Basic)
APPLICATION (CC, No, Date): EP 93202308 870414;
PRIORITY (CC, No, Date): US 852840 860416
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE
RELATED PARENT NUMBER(S) - PN (AN):
EP 302887 (EP 879031136)
INTERNATIONAL PATENT CLASS: C07K-015/04; A61K-039/09; G01N-033/569;

ABSTRACT EP 577224 A1
A protein as described which is a substantially purified trypsin-resistant C surface protein of type I/c Group B Streptococcus which has a molecular weight of about 14,000 and which is non-cross-immunoreactive with group B Streptococcus bacterial *polysaccharides"*, yet cross-immunogenic with type Ia/c Group B Streptococcus (GBS). The protein or a fragment comprising an immunodeterminant thereof is used in a *vaccine"* that elicits protection against type Ia/c GBS, the protein or fragment being optionally conjugated to a carrier.
ABSTRACT WORD COUNT: 79

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language Update Word Count
Searcher : Shears 308-4994

CLAIMS A	(English)	EPABF2	226
SPEC A	(English)	EPABF2	1980
Total word count - document A			2206
Total word count - document B			0
Total word count - documents A + B			2206

11/3,AB/9 (Item 5 from file: 348)
DIALOG(R)File 348:European Patents

00577549
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
PROTEIN D - AN IgD-BINDING PROTEIN OF HAEMOPHILUS INFLUENZAE
PROTEIN D- EIN IGD-BINDENDES PROTEIN VON HAEMOPHILUS INFLUENZAE
PROTEINE D - PROTEINE FIXATRICE D'IgD, DE HAEMOPHILUS INFLUENZAE
PATENT ASSIGNEE:
Forsgren, Arne, (1450180), Sothonsvagen 4B33, 230 11 Falsterbo, (SE),
(applicant designated states:
AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;SE)
INVENTOR:
Forsgren, Arne, Sothonsvagen 4B33, 230 11 Falsterbo, (SE)
LEGAL REPRESENTATIVE:
Wiklund, Erik (24531), AWAPATENT AB, Box 5117, 200 71 Malmo, (SE)
PATENT (CC, No, Kind, Date): EP 594610 A1 940504 (Basic)
EP 594610 B1 980902
WO 9118926 911212
APPLICATION (CC, No, Date): EP 91907067 910221; WO 91SE129 910221
PRIORITY (CC, No, Date): SE 901949 900531
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: C07K-014/00; C12N-015/31; A61K-039/102;
C12Q-001/04; C12Q-001/68; C12N-015/62
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9836	3197
CLAIMS B	(German)	9836	3252
CLAIMS B	(French)	9836	3563
SPEC B	(English)	9836	6200
Total word count - document A			0
Total word count - document B			16212
Total word count - documents A + B			16212

11/3,AB/10 (Item 6 from file: 348)
DIALOG(R)File 348:European Patents

Searcher : Shears 308-4994

00447464
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
COMPOSITIONS AND TREATMENTS FOR PNEUMONIA IN ANIMALS
ZUBEREITUNGEN UND BEHANDLUNGEN VON PNEUMONIA IN TIEREN
COMPOSITIONS ET TRAITEMENTS DE LA PNEUMONIE CHEZ LES ANIMAUX
PATENT ASSIGNEE:
The University of Saskatchewan, (743360), 124 Veterinary Road, Saskatoon, Saskatchewan S7N 0W0, (CA), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
ACRES, Stephen, D., 1215 Osler Street, Saskatoon, Saskatchewan S7N 0T8, (CA)
BARIUK, Lorne, A., 245 East Place, Saskatoon, Saskatchewan S7J 2Y1, (CA)
POTTER, Andrew, A., 521 Dalhousie Crescent, Saskatoon, Saskatchewan S7H 3S5, (CA)
LAWMAN, Michael, J., P., 507 Northwest 39th Road, Suite 208 Gainesville, FL 32607, (US)
LEGAL REPRESENTATIVE:
Griffin, Kenneth David et al (48701), Saunders & Dolleymore, 9, Rickmansworth Road, Watford, Hertfordshire WD1 7HE, (GB)
PATENT (CC, No, Kind, Date): EP 527724 A1 930224 (Basic)
EP 527724 B1 970827
WO 9115237 911017
APPLICATION (CC, No, Date): EP 90906831 900525; WO 90CA170 900525
PRIORITY (CC, No, Date): US 504850 900405
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: A61K-039/102; C12N-015/31;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9708W4	432
CLAIMS B	(German)	9708W4	419
CLAIMS B	(French)	9708W4	513
SPEC B	(English)	9708W4	10829
Total word count - document A			0
Total word count - document B			12193
Total word count - documents A + B			12193

11/3,AB/11 (Item 7 from file: 348)
DIALOG(R)File 348:European Patents

00446838
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
VACCINES" CONTAINING AVIRULENT phoP-TYPE MICROORGANISMS
Searcher : Shears 308-4994

IMPFSTOFFE ENTHALTENDE AVIRULENTE PHOP-TYPE MIKROORGANISMEN
VACCINS" CONTENANT DES MICROORGANISMES AVIRULENTS DU TYPE phoP
PATENT ASSIGNEE:
  WASHINGTON UNIVERSITY, (645441), Campus Box 1137, 1 Brookings Drive, St. Louis, Missouri 63130-4899, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
  CURTISS, Roy, III, 6065 Lindell Boulevard, St. Louis, MO 63112, (US)
  GALAN, Jorge, 5945 McPherson, St. Louis, MO 63112, (US)
LEGAL REPRESENTATIVE:
  Goldin, Douglas Michael et al (31061), J.A. KEMP & CO. 14, South Square Gray's Inn, London WC1R 5LX, (GB)
PATENT (CC, No, Kind, Date): EP 465560 A1 920115 (Basic)
EP 465560 A1 920408
EP 465560 B1 960605
WO 9011687 901018
APPLICATION (CC, No, Date): EP 90905859 900323; WO 90US1573 900323
PRIORITY (CC, No, Date): US 331979 890331
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: A01N-063/00; A61K-038/00; A61K-039/02; C12N-001/20;
NOTE:
  No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB96	861
CLAIMS B	(German)	EPAB96	797
CLAIMS B	(French)	EPAB96	976
SPEC B	(English)	EPAB96	12393
Total word count - document A			0
Total word count - document B			15027
Total word count - documents A + B			15027

11/3,AB/12 (Item 8 from file: 348)
DIALOG(R)File 348:European Patents

00381059
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
A METHOD OF MAINTAINING A DESIRED RECOMBINANT GENE IN A GENETIC POPULATION OF CELLS.
VERFAHREN ZUR ERHALTUNG EINES ERWUNSCHTEN REKOMBINANTEN GENS IN EINER GENETISCHEN ZELLPOPULATION.
PROCEDE PERMETTANT DE MAINTENIR UN GENE RECOMBINANT DESIRE DANS UNE POPULATION CELLULAIRE GENETIQUE.
PATENT ASSIGNEE:
  WASHINGTON UNIVERSITY, (645448), 1 Brookings Drive, St. Louis, MO 63130,

(US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)
INVENTOR:
CURTISS Roy, III, 6065 Lindel Street, Saint Louis, MO 63112, (US)
LEGAL REPRESENTATIVE:
Goldin, Douglas Michael et al (31061), J.A. KEMP & CO. 14, South Square
Gray's Inn, London WC1R 5LX, (GB)
PATENT (CC, No, Kind, Date): EP 381706 A1 900816 (Basic)
EP 381706 A1 910911
EP 381706 B1 950426
WO 8903427 890420
APPLICATION (CC, No, Date): EP 89900028 881006; WO 88US3496 881006
PRIORITY (CC, No, Date): US 106072 871007; US 251304 881003
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: C12N-015/68; C12N-001/21; A61K-038/00;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB95	573
CLAIMS B	(German)	EPAB95	575
CLAIMS B	(French)	EPAB95	648
SPEC B	(English)	EPAB95	17128
Total word count - document A			0
Total word count - document B			18924
Total word count - documents A + B			18924

11/3,AB/13 (Item 9 from file: 348)
DIALOG(R)File 348:European Patents

00331339
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
AVIRULENT MICROBES AND USES THEREFOR.
AVIRULENTE MIKROBEN UND DEREN VERWENDUNGEN.
MICROBES AVIRULENTS ET LEURS UTILISATIONS.
PATENT ASSIGNEE:
Mega Holding, (1692530), 1025 18th Street South Suite 201, Birmingham,
Alabama 35205, (US), (applicant designated states:
AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)
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INVENTOR:
CURTISS, Roy, III, 6065 Lindell Boulevard, St. Louis, MO 63112, (US)
LEGAL REPRESENTATIVE:
Hansen, Bernd, Dr.rer.nat. et al (4922), Hoffmann, Eitle & Partner
Patentanwalte Postfach 81 04 20, D-81904 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 315682 A1 890517 (Basic)

EP 315682 A1 900103
EP 315682 B1 931222
WO 8809669 881215
APPLICATION (CC, No, Date): EP 88905542 880601; WO 88US1899 880601
PRIORITY (CC, No, Date): US 58360 870604
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: A61K-039/02; C12N-015/00; C12N-001/20;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	541
CLAIMS B	(German)	EPBBF1	567
CLAIMS B	(French)	EPBBF1	588
SPEC B	(English)	EPBBF1	14534
Total word count - document A			0
Total word count - document B			16230
Total word count - documents A + B			16230

11/3,AB/14 (Item 10 from file: 348)
DIALOG(R)File 348:European Patents

00291174
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
A method of determining the presence of endotoxin in a sample.
Verfahren zur Bestimmung der Anwesenheit von Endotoxin in einer Probe.
Methode pour la determination de la presence d'endotoxine dans un echantillon.
PATENT ASSIGNEE:
Baek, Leif, (975060), Heinesgade 1, 4.tv., DK-2200 Copenhagen K, (DK),
(applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
Koch, Claus, (975080), Overgaden oven Vandet 26, 1,, DK-1415 Copenhagen K, (DK), (applicant designated states:
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
INVENTOR:
Baek, Leif, Heinesgade 1, 4.tv., DK-2200 Copenhagen K, (DK)
Koch, Claus, Overgaden oven Vandet 26, 1,, DK-1415 Copenhagen K, (DK)
LEGAL REPRESENTATIVE:
Nyeng, Joergen et al (61191), c/o Hofman-Bang & Boutard A/S Adelgade 15, DK-1304 Copenhagen K, (DK)
PATENT (CC, No, Kind, Date): EP 291856 A2 881123 (Basic)
EP 291856 A3 901010
EP 291856 B1 941228
APPLICATION (CC, No, Date): EP 88107619 880511;
PRIORITY (CC, No, Date): DK 872558 870520
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE
Searcher : Shears 308-4994

INTERNATIONAL PATENT CLASS: G01N-033/569; G01N-033/579; G01N-033/543; G01N-033/577; G01N-033/68; C12P-021/00; C12N-015/00;

ABSTRACT EP 291856 A2

In a method of determining the presence of an endotoxin or endotoxin-like material in a sample

a) a sample is incubated with a component of horseshoe crab amoebocytes lysate or haemolymph or a synthetic analogue thereof,

b) the incubated mixture of the sample and the component or analogue resulting from step a) is reacted with an antibody raised against the component or analogue or against a reaction product of the incubation of step a), and

c) the presence of endotoxin or endotoxin-like material in the sample is determined by detecting any bound antibody in the reaction mixture of step b).

In the method either the component or analogue or the antibody or the endotoxin or endotoxin-like material is coupled to a solid support.

ABSTRACT WORD COUNT: 129

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPBBF2	2024
CLAIMS B	(English)	EPBBF2	2106
CLAIMS B	(German)	EPBBF2	2202
CLAIMS B	(French)	EPBBF2	2413
SPEC A	(English)	EPBBF2	13061
SPEC B	(English)	EPBBF2	13272
Total word count - document A			15085
Total word count - document B			19993
Total word count - documents A + B			35078

11/3,AB/15 (Item 11 from file: 348)

DIALOG(R)File 348:European Patents

00269214

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Method of detecting or estimating biological materiel.

Methode zum Nachweis oder zur Abschatzung von biologischem Material.

Methode de detection ou d'estimation de matiere biologique.

PATENT ASSIGNEE:

G.D. Searle & Co., (892560), P.O. Box 5110, Chicago Illinois 60680, (US), (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;NL;SE)

INVENTOR:

Rook, Graham Arthur William, Old Hall Old Hall Road Steeple Bumpstead, Haver Hill Suffolk CB9 7EJ, (GB)

Edge, Jennifer Jane, The Stone Barn Gravel Lane, Drayton Oxfordshire, (GB)

Searcher : Shears 308-4994

LEGAL REPRESENTATIVE:
  Collier, Jeremy Austin Grey et al (29481), J.A.Kemp & Co. 14, South
    Square Gray's Inn, London WC1R 5EU, (GB)
PATENT (CC, No, Kind, Date): EP 255342 A1 880203 (Basic)
                             EP 255342 B1 920520
APPLICATION (CC, No, Date): EP 87306664 870728;
PRIORITY (CC, No, Date): GB 8618443 860729
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS: G01N-033/577; G01N-033/564; G01N-033/569;
  C12P-021/00;

ABSTRACT EP 255342 A1
  Monoclonal antibodies raised against cell walls of *Group"* *A"*
  Streptococci" are specific to biological materials, e.g.
  immunoglobulins, having terminal N-acetyl glucosamine residues and can be
  used in their detection, e.g. in the diagnosis of diseases characterized
  by their presence, e.g. rheumatoid arthritis and Crohn's disease.
ABSTRACT WORD COUNT: 49

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	743
CLAIMS B	(German)	EPBBF1	257
CLAIMS B	(French)	EPBBF1	275
SPEC B	(English)	EPBBF1	2590
Total word count - document A			0
Total word count - document B			3865
Total word count - documents A + B			3865

11/3,AB/16 (Item 12 from file: 348)
DIALOG(R)File 348:European Patents

00245151
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Diagnostic method for gonorrhea by assay of IgA1 fragments.
Diagnostisches Verfahren fur Gonorrhoe durch Proben von IgA1-Fragmenten.
Procede diagnostique pour gonorrhee par l'essai des fragments de IgA1.
PATENT ASSIGNEE:
  IMMUNOGON ASSOCIATES, (834390), 98 Cutter Mill Road Suite 484N, Great
    Neck New York, (US), (applicant designated states:
    CH;DE;FR;GB;IT;LI;SE)
INVENTOR:
  Blake, Milan, 500 East 63rd Street, New York, NY, (US)
LEGAL REPRESENTATIVE:
  Lawrence, Peter Robin Broughton et al (32881), GILL JENNINGS & EVERY,
    Broadgate House, 7 Eldon Street, London EC2M 7LH, (GB)
                          Searcher : Shears 308-4994

PATENT (CC, No, Kind, Date): EP 232165 A2 870812 (Basic)
EP 232165 A3 881214
EP 232165 B1 940427
APPLICATION (CC, No, Date): EP 87300950 870203;
PRIORITY (CC, No, Date): US 826227 860205
DESIGNATED STATES: CH; DE; FR; GB; IT; LI; SE
INTERNATIONAL PATENT CLASS: G01N-033/571; G01N-033/563; G01N-033/573; G01N-033/569

ABSTRACT EP 232165 A2

Method for assay of fragments produced by the reaction between the enzyme immunoglobulin A protease and its substrate immunoglobulin A, sub-class 1 comprising immunoassay with antibodies capable of reacting specifically with neo-epitopes on the fragments thus produced. IgA1, IgAP and bacteria which secrete IgAP may be detected by the method. The assay is especially useful in the detection of Neisseria gonorrhea and in the diagnosis of gonorrhea.

ABSTRACT WORD COUNT: 71

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	560
CLAIMS B	(German)	EPBBF1	572
CLAIMS B	(French)	EPBBF1	645
SPEC B	(English)	EPBBF1	5508
Total word count - document A			0
Total word count - document B			7285
Total word count - documents A + B			7285

? ds; t 15/3,ab/1-6

Set	Items	Description
S12	182	L(W)RHAP OR LRHAP
S13	10	S1 AND S12
S14	9	S13 NOT (S5 OR S10)
S15	6	RD (unique items)

>>>No matching display code(s) found in file(s): 60, 65, 113

15/3,AB/1 (Item 1 from file: 35)
DIALOG(R)File 35:DISSERTATION ABSTRACTS ONLINE

01256406 AADNN69503
THE SYNTHESIS, IMMUNOLOGICAL CHARACTERIZATION AND NMR ANALYSIS OF CELL-WALL OLIGOSACCHARIDES OF BACTERIAL ORIGIN (STREPTOCOCCI)
Author: REIMER, KERRY BRUCE
Degree: PH.D.
Year: 1991
Corporate Source/Institution: SIMON FRASER UNIVERSITY (CANADA) (0791)

Searcher : Shears 308-4994

Source: VOLUME 53/08-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 4089. 241 PAGES
ISBN: 0-315-69503-X

Trisaccharide (B(C)A), pentasaccharide (B(C)AB$\sp\prime$C$\sp\prime$) and hexasaccharide (B(C)AB$\sp\prime$(C$\sp\prime)$A$\sp\prime$) segments of the cell-wall polysaccharide of the β-hemolytic *Streptococci"* *Group"* *A"* (shown below) have been prepared by means of a series of Konigs-Knorr glycosylations. (UNFORMATTED TABLE OR EQUATION FOLLOWS)$$\left\lbrack\eqalign{&\rm\sk{25}{\bf A}\sp\prime\sk{25}{\bf B}\sp\prime\sk{25}{\bf A}\sk{25}{\bf B}\cr&\rm\alpha\ *L"*\ *Rhap"*\ (1\ 2)\ \alpha\ *L"*\ *Rhap"*\ (1\ 3)\ \alpha\ *L"*\ *Rhap"*\ (1\ 2)\ \alpha\ *L"*\ *Rhap"*\ (1\ 3)\cr\cr &\rm\sk{50}{-}\beta{-}D{-}Glc{\it p}NAc\sk{50}{-}\beta{-}D{-}Glc{\it p}NAc\cr&\sk{75}C\sp\prime\sk{75}C\cr}\right\rbrack\sb{\rm n}$$The synthesis of a fully functionalized branched trisaccharide sequence, is also described; this unit has served as a key intermediate in an efficient, convergent block synthesis of a hexasaccharide portion of the polysaccharide. The trisaccharide and pentasaccharide moieties were prepared as both propyl and 8-(methoxycarbonyl)octyl glycosides, the former for use as haptens in antigen/antibody binding studies, and the latter for use in the preparation of synthetic antigens. All synthetic intermediates and final products were fully characterized by a full complement of 2-dimensional NMR experiments. Glycoconjugates of (AB$\sp\prime$C$\sp\prime$), (B(C)A) and (B(C)AB$\sp\prime$C$\sp\prime$) segments of the polysaccharide with the proteins bovine serum albumin (BSA) and horse hemoglobin (horse-Hb) were prepared from the corresponding 8-(methoxycarbonyl)octyl glycosides. Polyclonal antisera against the BSA glycoconjugates were raised in rabbits, and a panel of disaccharide through pentasaccharide haptens were used in a series of indirect inhibition ELISAs to characterize the binding profiles of the antisera. A panel of monoclonal antibodies was generated by using a culture of heat-killed *Streptococci"* *Group"* *A"* bacteria as an immunogen. The BSA and Horse-Hb glycoconjugates were used as screening reagents in one monoclonal antibody protocol to identify carbohydrate-directed antibodies. The binding profiles of the chosen monoclonal antibodies were characterized by a series of indirect inhibition ELISAs, incorporating the glycoconjugates as solid phase antigens and a panel of disaccharide through pentasaccharide sequences of the polysaccharide as inhibitors. A monoclonal antibody (SA-2C) with greater affinity for the pentasaccharide sequence than the smaller hapten sequences was identified for use as an immunodiagnostic reagent. In a separate study, a heptasaccharide sequence of the Shigella flexneri variant Y lipopolysaccharide antigenic determinant was fully characterized by 2-dimensional NMR techniques. Transient nOe effects in the rotating frame were used to infer a model of hapten conformation.

11025036 PASCAL No.: 93-0534542
Convergent synthesis of an elusive hexasaccharide corresponding to the cell-wall polysaccharide of the beta -hemolytic *Streptococcus"* *Group"* *A"*
MARINO-ALBERNAS J R; HARRIS S L; VIKRAM VARMA; PINTO B M
Simon Fraser univ., dep. chemistry, Burnaby BC V5A 1S6, Canada
Journal: Carbohydrate research, 1993, 245 (2) 245-257
Language: English
A convergent synthesis of a hexasaccharide corresponding to the cell-wall polysaccharide of the beta -hemolytic *Streptococcus"* *Group"* *A"* is described. The strategy relies on the preparation of a key linear trisaccharide unit beta -D-GlcpNAc-(1 rightarrow 3) alpha -*L"*-*Rhap"*-(1 rightarrow 2)- alpha -*L"*-*Rhap"* which has previously resisted our efforts. The trisaccharide functions both as a glycosyl acceptor and donor to give an elusive hexasaccharide. This fully functionalized unit can serve, in turn, as a glycosyl acceptor or donor for the synthesis of higher-order structures. Deprotection gives a hitherto unknown hexasaccharide for use as a hapten in immunochemical studies. The characterization of all compounds by high-resolution SUP 1 H and SUP 1 SUP 3 C NMR spectroscopy is also described

15/3,AB/3 (Item 2 from file: 144)
DIALOG(R)File 144:PASCAL

10112737 PASCAL No.: 92-0318356
Convergent synthesis of higher-order oligosaccharides corresponding to the cell-wall polysaccharide of the beta -hemolytic *Streptococci"* *group"* *A"*. A branched hexasaccharide hapten
REIMER K B; HARRIS S L; VARMA V; MARIO PINTO B
Simon Fraser univ., dep. chemistry, Burnaby BC V5A 1S6, Canada
Journal: Carbohydrate research, 1992, 228 (2) 399-414
Language: English
A convergent synthesis of a hexasaccharide corresponding to the cell-wall polysaccharide of the beta -hemolytic *Streptococci"* *Group"* *A"* is described. The strategy relies on the preparation of a key branched trisaccharide unit alpha -*L"*-*Rhap"* -(1 rightarrow 2)-(beta -D-GlcpNAc-(1 rightarrow 3))- alpha -*L"*-*Rhap"* which functions both as a glycosyl acceptor and donor. The hexasaccharide is obtained after only three glycosylation reactions. This fully functionalized unit can serve, in turn, as a glycosyl acceptor or donor for the synthesis of higher-order structures

15/3,AB/4 (Item 3 from file: 144)
DIALOG(R)File 144:PASCAL

09616644 PASCAL No.: 91-0407089
Synthesis and n.m.r. analysis of branched trisaccharide and pentasaccharide haptens of the beta -hemolytic *streptococci"* *group"* *A"* and the preparation of synthetic antigens
PINTO B M; REIMER K B; TIXIDRE A
Simon Fraser univ., dep. chemistry, Burnaby BC V5A 1S6, Canada
Journal: Carbohydrate research, 1991, 210 199-219
Language: English
The key dissacharide acceptors, allyl or 8-(methoxycarbonyl)octyl 3-O-(3,4,6-tri-O-benzyl-2-deoxy-2-phthalimido- beta -D-glucopyranosyl)-4-O-benzyl- alpha -L-rhamnopyranoside, in conjunction with a selectively blocked alpha -L-rhamnopyranosyl chloride under Koenigs Knorr conditions, afforded the branched trisaccharides. Analogously, glycosylation of the 8-(methoxycarbonyl)octyl disaccharide with a protected beta -D-GlcpNAc-(1 rightarrow 3)- alpha -*L"*-*Rhap"*-(1 rightarrow 3 iota alpha -*L"*-*Rhap"* chloride gave the pentasaccharide. Preparation of the synthetic antigens followed coupling of the 8-(methoxycarbonyl)octyl glycosides to bovine serum albumin via the acyl azide intermediates

15/3,AB/5 (Item 1 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

07757840 GENUINE ARTICLE#: VJ139 NUMBER OF REFERENCES: 25
TITLE: Efficient, convergent syntheses of oligosaccharide allyl glycosides corresponding to the *Streptococcus"* *Group"* *A"* cell-wall polysaccharide
AUTHOR(S): Auzanneau FI (REPRINT) ; Forooghian F; Pinto BM
CORPORATE SOURCE: SIMON FRASER UNIV,DEPT CHEM/BURNABY/BC V5A 1S6/CANADA/ (REPRINT); SIMON FRASER UNIV,DEPT CHEM/BURNABY/BC V5A 1S6/CANADA/
PUBLICATION TYPE: JOURNAL
PUBLICATION: CARBOHYDRATE RESEARCH, 1996, V291 (SEP 23), P21-41
PUBLISHER: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS
ISSN: 0008-6215
LANGUAGE: English DOCUMENT TYPE: ARTICLE
ABSTRACT: Convergent syntheses of di-, tri, tetra-, penta-, and hexa-saccharide allyl glycosides corresponding to the beta-hemolytic *Streptococcus"* *Group"* *A"* cell-wall polysaccharide are described. The strategy relies on the preparation of related di- and tri-saccharide building blocks: beta-D-Glc pNAc-(1-3)-alpha-*L"*-*Rhap"* and alpha-*L"*-*Rhap"*-(1-2)-[(beta-D-Glc pNAc-(1-3)]-alpha-*L"*-*Rhap"*, which could be used either as glycosyl donors or accepters in subsequent glycosylation reactions. The protecting groups were chosen to allow the selective removal of the allyl aglycon to access the intermediate glycosyl donors but also to allow their own removal without affecting the allyl group. The allyl group was intended

for use in conjugation of the oligosaccharides to soluble protein carriers or solid supports for the preparation of antigens and immunoadsorbents, respectively. (C) 1996 Elsevier Science Ltd.
ISSN: 0008-6215

15/3,AB/6 (Item 2 from file: 440)

02773856 GENUINE ARTICLE#: FJ294 NUMBER OF REFERENCES: 27
TITLE: OLIGOSACCHARIDES CORRESPONDING TO THE ANTIGENIC DETERMINANTS OF THE BETA-HEMOLYTIC *STREPTOCOCCI"* *GROUP"*-*A"* .3. SYNTHESIS AND NMR ANALYSIS OF BRANCHED TRISACCHARIDE AND PENTASACCHARIDE HAPTENS OF THE BETA-HEMOLYTIC *STREPTOCOCCI"* *GROUP"*-*A"* AND THE PREPARATION OF SYNTHETIC ANTIGENS
AUTHOR(S): PINTO BM; REIMER KB; TIXIDRE A
CORPORATE SOURCE: SIMON FRASER UNIV,DEPT CHEM/BURNABY V5A 1S6/BC/CANADA/ (Reprint)
PUBLICATION: CARBOHYDRATE RESEARCH, 1991, V210, MAR (MAR 20), P199-219
LANGUAGE: ENGLISH DOCUMENT TYPE: ARTICLE
ABSTRACT: The synthesis of branched trisaccharide and pentasaccharide portions of the cell-wall polysaccharide of the beta-hemolytic *Streptococci"* *Group"* *A"* is described. The key dissaccharide acceptors, allyl or 8-(methoxycarbonyl)octyl 3-O-(3,4,6-tri-O-benzyl-2-deoxy-2-phthalimido-beta-D-glucopyranosyl)-4-O-benzyl-alpha-L-rhamnopyranoside, in conjunction with a selectively blocked alpha-L-rhamnopyranosyl chloride under Koenigs-Knorr conditions, afforded the branched trisaccharides in 81 and 62% yield, respectively. Analogously, glycosylation of the 8-(methoxycarbonyl)octyl disaccharide with a protected beta-D-GlcpNAc-(1-->3)-alpha-*L"*-*Rhap"*-(1-->3)-alpha-*L"*-*Rhap"* chloride gave the pentasaccharide in 43% yield. The key disaccharide acceptors were obtained, in turn, from the allyl or 8-(methoxycarbonyl)octyl rhamnoside acceptors and 3,4,6-tri-O-benzyl-2-deoxy-2-phthalimido-beta-D-glucopyranosyl chloride under Koenigs-Knorr conditions. The latter glycosyl donor has not been described previously. Removal of the protecting groups afforded the trisaccharide haptens as their 1-propyl and 8-(methoxycarbonyl)octyl glycosides and the pentasaccharide as its 8-(methoxycarbonyl)octyl glycoside. The compounds have been subjected to detailed analysis by two-dimensional n.m.r. methods. Preparation of the synthetic antigens followed coupling of the 8-(methoxycarbonyl)octyl glycosides to bovine serum albumin via the acyl azide intermediates.
? ds; t 21/3,ab/1-9

Set	Items	Description
S16	415	AU=(TAI, J? OR TAI J?)
S17	140	AU=(MICHON, F? OR MICHON F?)

Searcher : Shears 308-4994

-Author(s)

S18 8 S16 AND S17
S19 15 (S16 OR S17) AND S1
S20 12 (S18 OR S19) NOT (S5 OR S10 OR S14)
S21 9 RD (unique items)
>>>No matching display code(s) found in file(s): 60, 65, 113

21/3,AB/1 (Item 1 from file: 65)
DIALOG(R)File 65:Inside Conferences

02126507 INSIDE CONFERENCE ITEM ID: CN022241981
Phagocytic, Serological, and Protective Properties of *Streptococcal"* *Group"* *A"* Carbohydrate Antibodies
Zabriskie, J. B.; Poon-King, T.; Blake, M. S.; *Michon, F."*
CONFERENCE: Streptococci and streptococcal diseases: Streptococci and the host -Lancefield international symposium; 13th
ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY, 1997; VOL 418 P: 917-920
New York, London, Plenum Press, 1997
ISBN: 0306456036
LANGUAGE: English DOCUMENT TYPE: Conference Selected papers
CONFERENCE EDITOR(S): Horaud, T.
CONFERENCE LOCATION: Paris
CONFERENCE DATE: Sep 1996 (199609) (199609)

21/3,AB/2 (Item 2 from file: 65)
DIALOG(R)File 65:Inside Conferences

01868581 INSIDE CONFERENCE ITEM ID: CN019327048
Candidate *Group"* *a"* *Streptococcal"* Conjugate Vaccine Based on the Group a Polysaccharide
Michon, F."; Salvadori, L.; Zabriskie, J.; Blake, M.
CONFERENCE: Chemotherapy-International congress; 19th
CANADIAN JOURNAL OF INFECTIOUS DISEASES, 1995; VOL 6; NUMBER SUP/C P: 0664
Pulsus Group, 1995
ISSN: 1180-2332
LANGUAGE: English DOCUMENT TYPE: Conference Abstracts and programme
CONFERENCE LOCATION: Montreal, Canada
CONFERENCE DATE: Jul 1995 (199507) (199507)
NOTE:
Also known as 19ICC. Theme title: 100 years after Pasteur, a new age in chemotherapy

21/3,AB/3 (Item 3 from file: 65)
DIALOG(R)File 65:Inside Conferences

Searcher : Shears 308-4994

01868208 INSIDE CONFERENCE ITEM ID: CN019323313
Development of Conjugate Vaccines Against Neisseria Meningitidis
Tai, J. Y."; *Michon, F."*; Fusco, P. C.
CONFERENCE: Chemotherapy-International congress; 19th
CANADIAN JOURNAL OF INFECTIOUS DISEASES, 1995; VOL 6; NUMBER SUP/C P: 0289
Pulsus Group, 1995
ISSN: 1180-2332
LANGUAGE: English DOCUMENT TYPE: Conference Abstracts and programme
CONFERENCE LOCATION: Montreal, Canada
CONFERENCE DATE: Jul 1995 (199507) (199507)
NOTE:
Also known as 19ICC. Theme title: 100 years after Pasteur, a new age in chemotherapy

21/3,AB/4 (Item 1 from file: 77)
DIALOG(R)File 77:CONFERENCE PAPERS INDEX

4103105
Supplier Accession Number: 94-06218 V22N06
Further immunogenicity studies on conjugates of type II and III capsular polysaccharides of group B Streptococcus
Michon, F.; D'Ambra, A.J.; Dong, C.; Lohmar, P.; Fusco, P.; Enriquez, A.; Tai, J.
North American Vaccine, Beltsville, MD, USA
94th Annual Meeting of the American Society for Microbiology 9425004
Las Vegas, NV (USA) 23-27 May 1994
American Association for Microbiology
American Society for Microbiology, 1325 Massachusetts Ave., NW, Washington, DC 20005, Abstracts. Poster Paper No. E25

21/3,AB/5 (Item 2 from file: 77)
DIALOG(R)File 77:CONFERENCE PAPERS INDEX

4075221
Supplier Accession Number: 94034371 V22N03
Development of a monovalent conjugate vaccine against Neisseria meningitidis group A and the divalent vaccine against groups A and C
Hronowski, L.J.J.; Michon, F.; Huang, C.-H.; Pullen, J.; Tai, J.
North American Vaccine, Beltsville, Md., USA
33rd Interscience Conference on Antimicrobial Agents and Chemotherapy
9340336 New Orleans, LA (USA) 17-20 October 1993
American Society for Microbiology
ASM PressP.O. Box 605 Herndon, VA 22070; ph: (703)787-3305, Program and
Searcher : Shears 308-4994

Abstracts Poster Paper No. 174

21/3,AB/6 (Item 1 from file: 144)
DIALOG(R)File 144:PASCAL

12895364 PASCAL No.: 97-0160618
Preclinical evaluation of a novel group B meningococcal conjugate vaccine that elicits bactericidal activity in both mice and nonhuman primates
FUSCO P C; *MICHON F"*; *TAI J Y"*; BLAKE M S
North American Vaccine, Inc., Beltsville, Maryland, United States
Journal: The Journal of infectious diseases, 1997, 175 (2) 364-372
Language: English
Group B meningococcal (GBM) conjugate vaccines were prepared using chemically modified N-propionylated polysialic acid, from Escherichia coli K1 polysaccharide capsule, coupled by reductive amination to tetanus toxoid and purified recombinant GBM porin (rPorB). All conjugates elicited high antibody levels in mice with good booster responses. However, only rPorB conjugates elicited bactericidal activity specific against a broad spectrum of five different GBM serotypes. Bactericial activity was completely inhibited by free N-propionylated polysaccharide. In baboons and rhesus monkeys, rPorB conjugates elicited high antibody titers, with IgG booster responses 9- to 15-fold higher than primary responses. Bactericial activity increased 19- to 39-fold over preimmune values, using rabbit complement; increased bactericial activity was also confirmed with human and monkey complement. IgG cross-reactivity for unmodified N-acetyl polysaccharide was <5% for 79% of mice and <10% for 80% of primates. These studies strongly suggest that the N-propionylated polysialic acid-rPorB conjugate is an excellent vaccine candidate for human use.

21/3,AB/7 (Item 2 from file: 144)
DIALOG(R)File 144:PASCAL

12036749 PASCAL No.: 95-0230201
Group" *A"* *streptococcus"*-liposome ELISA antibody titers to group A polysaccharide and opsonophagocytic capabilities of the antibodies
SALVADORI L G; BLAKE M S; MCCARTY M; *TAI J Y"*; ZABRISKIE J B
Rockefeller univ., lab. clin. microbiology/immunology, New York NY, USA
Journal: The Journal of infectious diseases, 1995, 171 (3) 593-600
Language: English
Antibodies reactive with *group"* *A"* *streptococci"* (GAS) carbohydrate were studied by ELISA and in an indirect bactericidal assay. The ELISA used GAS carbohydrate covalently bound to phosphatidylethanolamine incorporated into liposomes so that both precipitating and nonprecipitating antibodies

were measured. Sera from children from different geographic areas exhibited marked differences in levels of anti-GAS carbohydrate antibody, which increased with age. The antibodies were predominantly of IgG. In bactericidal assays, most of these sera promoted phagocytosis of several type-specific M-positive strains. Opsonization was also related to serum levels of anti-GAS carbohydrate antibodies. These opsonizing antibodies were depleted from the serum by absorption of the sera on an N-acetyl-D-glucosamine affinity column. Antibody eluted from this column could partially restore opsonization of GAS. Anti-GAS carbohydrate antibodies play a major role in these opsonophagocytosis assays

21/3,AB/8 (Item 1 from file: 348)
DIALOG(R)File 348:European Patents

00878514
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
EXPRESSION OF GROUP B NEISSERIA MENINGITIDIS OUTER MEMBRANE (MB3) PROTEIN FROM YEAST AND VACCINES
Expression eines Gruppe-B-Proteins der ausseren Membran von Neisseria meningitidis (MB3) in Hefe und Vakzine
EXPRESSION DE LA PROTEINE DE LA MEMBRANE EXTERIEURE DE NEISSERIA MENINGITIDIS DU GROUPE B (MB3) A PARTIR DE LEVURES ET DE VACCINS
PATENT ASSIGNEE:
NORTH AMERICAN VACCINE, INC., (1439711), 12103 Indian Creek Court, Beltsville, MD 20705, (CA), (applicant designated states: AT;BE;CH;DE;DK;ES;FI;FR;GB;IE;IT;LI;LU;NL;SE)
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LEGAL REPRESENTATIVE:
Chapman, Paul William (73612), Kilburn & Strode, 20 Red Lion Street, London WC1R 4PJ, (GB)
PATENT (CC, No, Kind, Date): EP 877816 A1 981118 (Basic)
WO 9728273 970807
APPLICATION (CC, No, Date): EP 97906470 970131; WO 97US1687 970131
PRIORITY (CC, No, Date): US 10972 P 960201; US 20440 P 960613
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; IE; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: C12P-021/04; C12P-021/06; C12N-015/00; C12N-001/14; A23J-001/00; C07K-001/00; C07H-021/04; A61K-039/00;
Searcher : Shears 308-4994

A61K-039/385;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English

21/3,AB/9 (Item 2 from file: 348)
DIALOG(R)File 348:European Patents

00733926
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
GROUP" *A"* *STREPTOCOCCAL"* POLYSACCHARIDE IMMUNOGENIC COMPOSITIONS AND METHODS
GRUP A STREPTOKOKKENPOLYSACCHARIDE IMMUNOGEN-ZUSAMMENSETZUNGEN UND VERFAHREN
COMPOSITIONS DE POLYSACCHARIDES DE STREPTOCOQUES DU GROUPE A AYANT DES PROPRIETES IMMUNOGENES ET PROCEDES ASSOCIES
PATENT ASSIGNEE:
THE ROCKEFELLER UNIVERSITY, (315601), 1230 York Avenue, New York New York 10021-6399, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
NORTH AMERICAN VACCINE, INC., (1439711), 12103 Indian Creek Court, Beltsville, MD 20705, (CA), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
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ZABRISKIE, John, B., 1385 York Avenue, New York, NY 10021, (US)
TAI, Joseph, Y.", 1370 Cinnamon Drive, Fort Washington, PA 19034, (US)
MICHON, Francis", 9735 Country Meadows Lane, Laurel, MD 20723, (US
LEGAL REPRESENTATIVE:
Vossius, Volker, Dr. (12524), Dr. Volker Vossius, Patentanwaltskanzlei - Rechtsanwaltskanzlei, Holbeinstrasse 5, 81679 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 754055 A1 970122 (Basic)
WO 9528960 951102
APPLICATION (CC, No, Date): EP 95916479 950420; WO 95US4973 950420
PRIORITY (CC, No, Date): US 231229 940421
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: A61K-039/09; A61K-039/385; A61K-009/127;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
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21jan00 14:55:40 User219783 Session D1553.3

Devi, S.
09/207188

- key terms

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     FILE 'REGISTRY' ENTERED AT 12:37:25 ON 21 JAN 2000
                E CRM197/CN
                E "CRM-197"/CN
                E "CRM 197"/CN
                E DIPHTHERIA TOXOID/CN 5
                E DIPHTHERIA TOXIN/CN 5

     FILE 'CAPLUS' ENTERED AT 12:38:24 ON 21 JAN 2000
L1         2274 SEA ABB=ON  PLU=ON  ((GROUP OR CLASS OR TYPE)(W)A)(3A)STR
                EPTOCOC?
L2           13 SEA ABB=ON  PLU=ON  L1 AND (CRM197 OR CRM(2W)197 OR
                (TETAN? OR CHOLER? OR DIPHTHER?)(2A)(TOXIN OR TOXOID))
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L2   ANSWER 1 OF 13  CAPLUS  COPYRIGHT 2000 ACS
ACCESSION NUMBER:         1999:671034  CAPLUS
DOCUMENT NUMBER:          131:298664
TITLE:                    Chimeric antibodies comprising antigen binding
                          sites and B and T cell epitopes
INVENTOR(S):              Bona, Constantin; Zaghouani, Habib
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S., 62 pp., Cont.-in-part of U.S. Ser. No.
                          486,546, abandoned.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   3
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.   DATE
     ---------------   ----  --------      ---------------   --------
     US 5969109         A    19991019      US 1994-363276    19941222
     WO 9619584         A1   19960627      WO 1995-US16718   19951221
         W:  AU, CA, JP
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT,
             SE
     AU 9646435         A1   19960710      AU 1996-46435     19951221
PRIORITY APPLN. INFO.:                     US 1990-486546    19900228
                                           US 1991-687376    19910418
                                           US 1994-327636    19941024
                                           US 1994-363276    19941222
                                           WO 1995-US16718   19951221
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AB The present invention relates to chimeric antibodies which comprise a B cell epitope, a T cell epitope, and/or an antigen binding site. The chimeric antibodies may be produced by replacing at least a portion of an Ig mol. with the desired epitope or antigen binding site such that the functional capabilities of the epitope and the parent Ig are retained. The chimeric antibodies of the invention may be used to enhance an immune response against pathogens and tumor cells in subjects in need of such treatment. The antigen

epitope is derived from HIV-1 gp120, V3 loop, V3C, or V3M; influenza hemagglutinin or NP protein; hepatitis virus pre-S1 antigen; measles virus F protein; foot and mouth disease virus VP1; etc.

L2 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:597423 CAPLUS
DOCUMENT NUMBER: 131:213104
TITLE: Antigenic conjugates of conserved lipopolysaccharides of gram negative bacteria
INVENTOR(S): Arumugham, Rasappa G.; Fortuna-Nevin, Maria; Apicella, Michael A.; Gibson, Bradford W.
PATENT ASSIGNEE(S): American Cyanamid Company, USA
SOURCE: Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 941738	A1	19990915	EP 1999-301747	19990309
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AU 9919540	A1	19990923	AU 1999-19540	19990309
JP 11322793	A2	19991124	JP 1999-61354	19990309
PRIORITY APPLN. INFO.:			US 1998-37529	19980310

AB Antigenic conjugates are provided which comprise a carrier protein covalently bonded to the conserved portion of a lipopolysaccharide of a gram neg. bacteria, wherein said conserved portion of the lipopolysaccharide comprises the inner core and lipid A portions of said lipopolysaccharide, said conjugate eliciting a cross reactive immune response against heterologous strains of said gram neg. bacteria. The carrier protein is selected from **CRM197**, **tetanus toxin**, **diphtheria toxin**, pseudomonas exotoxin A, **cholera toxin**, **group A streptococcal** toxin, pneumolysin of Streptococcus pneumoniae, filamentous hemagglutinin (FHA), FHA of Bordetella pertussis, pili or pilins of Neisseria gonorrhoeae or meningitidis, outer membrane proteins of Neisseria meningitidis, C5A peptidase of Streptococcus and surface protein of Moraxella catarrhalis.

L2 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1998:816006 CAPLUS
DOCUMENT NUMBER: 130:65227
TITLE: Producing immunogenic constructs using soluble carbohydrates activated via organic cyanylating reagents
Searcher : Shears 308-4994

INVENTOR(S): Lees, Andrew
PATENT ASSIGNEE(S): Henry M. Jackson Foundation for the Advancement of Military Medicine, USA
SOURCE: U.S., 31 pp., Cont.-in-part of U.S. 5,651,971.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5849301	A	19981215	US 1995-482666	19950607
US 5651971	A	19970729	US 1995-408717	19950322
PRIORITY APPLN. INFO.:			US 1993-124491	19930922
			US 1995-408717	19950322

AB The invention relates to a process for producing an immunogenic construct comprising activating at least one first carbohydrate-contg. moiety with CDAP, CTEA or pNPC, and covalently joining the activated first moiety to a second moiety. Preferably, the first moiety is a polysaccharide and the second moiety is a protein. Immunogenic constructs are prepd. by this process using either direct or indirect conjugation of the first and second moieties.

L2 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1998:3733 CAPLUS
DOCUMENT NUMBER: 128:74069
TITLE: Phagocytic, serological, and protective properties of **streptococcal** **group A** carbohydrate antibodies
AUTHOR(S): Zabriskie, J. B.; Poon-King, T.; Blake, M. S.; Michon, F.; Yoshinaga, M.
CORPORATE SOURCE: Rockefeller Univ., New York, NY, 10021, USA
SOURCE: Adv. Exp. Med. Biol. (1997), 418(Streptococci and the Host), 917-919
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Sera from rabbits immunized with **group A** **streptococcal** carbohydrate (**group A** coupled with **tetanus toxoid**) were opsonic for a group A type 6 strain. Similar results were obtained with 3 other different M types. ELISA titers of less than 100,000 were non-phagocytic. The rabbit sera described above were able to protect mice challenged i.p. with **group A** **streptococcal** strains of 2 different M types. Thus,

group A streptococcal antibodies promote phagocytosis of several different strains of A streptococci, and these antibodies passively protect against an in vivo mouse challenge model.

L2 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1998:3720 CAPLUS
DOCUMENT NUMBER: 128:87562
TITLE: Intranasal immunization of mice with a streptococcal peptide-based vaccine
AUTHOR(S): Relf, Wendy; Hayman, Wendy; Russell-Jones, Gregory; Good, Michael
CORPORATE SOURCE: Royal Brisbane Hosp., Queensland Inst. Medical Res., Brisbane, 4029, Australia
SOURCE: Adv. Exp. Med. Biol. (1997), 418(Streptococci and the Host), 859-861
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The comparative role of systemic and local responses in immune protection after **group A streptococcal** infection are not fully understood. Recent data suggest that mucosal protective responses may be directed to non-type specific regions of the M protein. In this study, the authors examd. the salivary and serum immune responses following intranasal immunization with p145 and p160 peptide epitopes of the type M5 streptococci.

L2 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1996:687423 CAPLUS
DOCUMENT NUMBER: 125:326404
TITLE: Producing immunogenic constructs using soluble carbohydrates activated via organic cyanylating reagents
INVENTOR(S): Lees, Andrew
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9629094	A1	19960926	WO 1996-US4013	19960322

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR,

LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML

US 5651971	A	19970729	US 1995-408717 19950322
AU 9652591	A1	19961008	AU 1996-52591 19960322
EP 814833	A1	19980107	EP 1996-908900 19960322
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI			
JP 11502820	T2	19990309	JP 1996-528653 19960322
PRIORITY APPLN. INFO.:			US 1995-408717 19950322
			US 1995-482661 19950607
			US 1993-124491 19930922
			WO 1996-US4013 19960322

AB The invention relates to a process for producing an immunogenic construct comprising activating at least one first carbohydrate-contg. moiety with CDAP, and covalently joining the activated first moiety to a second moiety through a spacer reagent. Preferably, the first moiety is detran or polysaccharide derived from Pneumococcus, Hemophilus influenza, **group A Streptococcus**, group B **Streptococcus**, or Neisseria meningitidis; the second moiety is a protein selected from albumin, pertussis **toxoid**, **tetanus toxoid**, malaria-derived peptide, antibody, toxoid, or lipoprotein; and the spacer is ethylene diamine, 1,6-hexane diamine, adipic dihydrazide, cystamine, glycine, or lysine.

L2 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:	1996:207219 CAPLUS
DOCUMENT NUMBER:	124:308992
TITLE:	Mapping a conserved conformational epitope from the M protein of **group A streptococci**
AUTHOR(S):	Relf, W. A.; Cooper, J.; Brandt, E. R.; Hayman, W. A.; Anders, R. F.; Pruksakorn, S.; Currie, B.; Saul, A.; Good, M. F.
CORPORATE SOURCE:	Queensland Inst. Med. Res., Menzies Sch. Health Res., Casuarina, Australia
SOURCE:	Pept. Res. (1996), 9(1), 12-20 CODEN: PEREEO; ISSN: 1040-5704
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB The carboxyl terminus of the M protein of **group A streptococci** (GAS) is highly conserved and contains epitopes that have been shown to induce opsonic antibodies and protection against GAS infection. This region of the protein can also stimulate T cells, which can react in vitro with heart antigens. Since different segments of the carboxyl terminus may be involved in

immunity to GAS and in the pathogenesis of autoimmune disease (rheumatic heart disease), it is important to precisely define crit. epitopes. However, the M protein is known to be a coiled coil, and a crit. immunodominant antibody-binding epitope within this region (peptide 145, a 20-mer with the sequence LRRDLDASREAKKQVEKALE) is shown here to be conformational. Thus, small synthetic overlapping peptides of 8-12 amino acids in length that span peptide 145 (p145) were unable to capture antibodies present in p145-immune mouse sera or in endemic human sera, even though antibodies raised to these small peptides coupled to **diphtheria toxoid** could bind the smaller peptides and, in some cases, p145. A series of mutated peptides in which every residue of p145 was sequentially altered also failed to identify crit. residues for antibody binding. We thus devised a strategy to produce chimeric peptides in which small peptides copying the M protein sequence were displayed within a larger 28-mer peptide derived from the sequence of the GCN4 leucine zipper DNA binding protein of yeast. A 12-amino-acid window of the p145 sequence was inserted into the GCN4 peptide in such a way as to preserve any potential helical structure. The window was moved along one residue at a time to give a series of peptides representing p145. CD demonstrated that these larger chimeric peptides and p145, but not a shorter 12-mer peptide, displayed .alpha.-helical potential in 50% trifluoroethanol. Certain chimeric peptides efficiently captured antibodies specific for p145 and thus enabled us to map the minimal antibody-binding sequence, RRDLDASREAKK, referred to as J12. The chimeric peptide contg. this sequence, referred to as J2, was able to inhibit opsonization of GAS by human antisera contg. anti-peptide 145 antibodies. The T-cell response from p145-immunized responder B10.BR mice to J2 and J12 was much lower than the response to p145 and mapped to a different peptide.

L2 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1996:25269 CAPLUS
DOCUMENT NUMBER: 124:66569
TITLE: **Group A** **streptococcal** polysaccharide immunogenic compositions and methods
INVENTOR(S): Blake, Milan S.; Zabriskie, John B.; Tai, Joseph Y.; Michon, Francis
PATENT ASSIGNEE(S): Rockefeller University, USA; North American Vaccine, Inc.
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

Searcher : Shears 308-4994

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9528960	A1	19951102	WO 1995-US4973	19950420
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5866135	A	19990202	US 1994-231229	19940421
CA 2188284	AA	19951102	CA 1995-2188284	19950420
AU 9522967	A1	19951116	AU 1995-22967	19950420
AU 709797	B2	19990909		
EP 754055	A1	19970122	EP 1995-916479	19950420
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1149835	A	19970514	CN 1995-193413	19950420
BR 9507400	A	19971007	BR 1995-7400	19950420
JP 09512276	T2	19971209	JP 1995-527802	19950420
NO 9604413	A	19961217	NO 1996-4413	19961017
FI 9604189	A	19961218	FI 1996-4189	19961018
PRIORITY APPLN. INFO.:			US 1994-231229	19940421
			WO 1995-US4973	19950420

AB This invention provides a novel immunogenic compn. and vaccine, processes for producing them and methods for immunization against infectious and disease caused by **group A Streptococci**. The compns. include **group A streptococcal** polysaccharide covalently linked to protein or liposomes to form immunogenic conjugates. The method of immunization for this invention comprises administering to an individual an immunogenic amt. of group A polysaccharide. The group A polysaccharide may be administered as a vaccine either on its own, conjugated to proteins or conjugated to liposomes. Addnl., the group A polysaccharides may be assocd. with an adjuvant. This invention is particularly useful for providing both active and passive immunogenic protection for those populations most at risk of contracting **group A Streptococcal** infections and disease namely adults, pregnant women and in particular infants and children.

L2 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:	1994:268017 CAPLUS
DOCUMENT NUMBER:	120:268017
TITLE:	Human Rheumatoid Factors with Restrictive Specificity for Rabbit Immunoglobulin G: Auto- and Multi-reactivity, Diverse VH Gene Segment Usage and Preferential Usage of V.lambda.IIIb
AUTHOR(S):	Fang, Qiang; Kannapell, Carol C.; Gaskin,

Felicia; Solomon, Alan; Koopman, William J.; Fu, Shu Man
CORPORATE SOURCE: Sch. Med., Univ. Virginia, Charlottesville, VA, 22908, USA
SOURCE: J. Exp. Med. (1994), 179(5), 1445-56
CODEN: JEMEAV; ISSN: 0022-1007
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To det. the mol. and functional properties of human rheumatoid factors (RF), the authors established stable hybridomas and Epstein-Barr virus-transformed B cell lines from the synovial fluid or peripheral blood of three patients with rheumatoid arthritis and one patient with systemic lupus erythematosus. 17 Cell lines were obtained that produced high-titer Ig M (IgM) RF that reacted exclusively with rabbit but not human IgG or IgG of other mammalian species. Certain anti-rabbit IgG RF also had specificity for other mammalian antigens (Ag), including cytoskeletal proteins and intracellular proteins found in HeLa cells, as well as for Ag present in an ext. prepd. from the cell wall of **group A streptococci**. 13 Of the 17 RF contained .lambda.-type light (L) chains, of which 12 were classified serol. as members of the .lambda.-L chain variable region (V.lambda.) subgroup, designated V.lambda.III. The heavy chain V region (VH) and V.lambda. sequences of nine of these IgM.lambda. RF were detd. at the cDNA level. Five VH genes in three VH families were used by these antibodies (Ab), including VH1 (dp21/1-4b and dp10 [51p1]/hv1051), VH3 (dp38/3-15 and dp77/13-21), and VH4 (dp70/4-4b). The deduced V gene-encoded amino acid sequences of the .lambda. chains of these IgM.lambda. RF confirmed their serol. classification as .lambda.III, and they were further classified as members of the relatively uncommon V.lambda.III subgroup, designated V.lambda.IIIb. Based on cDNA analyses, nine were the product of three V.lambda.IIIb germline genes. Two such genes, designated hsiggll150 and hsiggll295, were cloned and sequenced from genomic DNA. Unique combinations of these VH and V.lambda.IIIb genes could be related to distinctive patterns of reactivity among the IgM.lambda. RF. Although the VH and V.lambda. regions of these Abs were expressed primarily as germline-encoded sequences, four of nine multireactive Abs had extensive V region mutation, indicative of an Ag-driven process. The finding that .lambda.IIIb L chains are preferentially found among anti-rabbit IgG RF, and that some of these Ab have specificity for other protein, cellular, and bacterial Ag, provides new insight into the pathogenesis of RA and related diseases.

L2 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1992:192190 CAPLUS
DOCUMENT NUMBER: 116:192190
TITLE: Epitopes of **group A streptococcal** M protein that evoke

cross-protective local immune responses
AUTHOR(S): Bronze, Michael S.; Courtney, Harry S.; Dale, James B.
CORPORATE SOURCE: Veterans Aff. Med. Cent., Memphis, TN, 38104, USA
SOURCE: J. Immunol. (1992), 148(3), 888-93
CODEN: JOIMA3; ISSN: 0022-1767
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The present studies were undertaken to identify conserved epitopes of **group A streptococcal** M proteins that evoke cross-protective mucosal immune responses. Two synthetic peptides copying conserved regions of type 5 M protein, designated SM5(235-264)C and SM5(265-291)C, were covalently linked to carrier mols. and their immunogenicity was tested in lab. animals. Rabbit antisera against both peptides cross-reacted with multiple serotypes of **group A streptococci**, indicating that the peptides contained broadly cross-reactive, surface exposed M protein epitopes. Serum antipeptide antibodies adsorbed to the surface of heterologous type 24 streptococci passively protected mice against intranasal challenge infections. Mice that were actively immunized intranasally with each synthetic peptide covalently linked to the B subunit of **cholera toxin** were protected against colonization and death after intranasal challenge infections with type 24 streptococci in the absence of serum opsonic antibodies. These data confirm and extend previous observations that conserved M protein epitopes evoke cross-protective local immunity and may serve as the basis for broadly cross-protective M protein vaccines.

L2 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1990:609467 CAPLUS
DOCUMENT NUMBER: 113:209467
TITLE: Synthetic peptide vaccine against mucosal colonization by **group A streptococci**. I. Protection against a heterologous M serotype with shared C repeat region epitopes
AUTHOR(S): Bessen, Debra; Fischetti, Vincent A.
CORPORATE SOURCE: Lab. Bacteriol. Immunol., Rockefeller Univ., New York, NY, 10021, USA
SOURCE: J. Immunol. (1990), 145(4), 1251-6
CODEN: JOIMA3; ISSN: 0022-1767
DOCUMENT TYPE: Journal
LANGUAGE: English

AB M protein is an antigenically variable virulence determinant present on the surface of **group A streptococci**, and it provides the basis for the serol. typing scheme. Type-specific serum antibodies afford strong protection against

infection by the homologous serotype. Previous studies demonstrated that intranasal immunization with Ag (antigen) corresponding to sequences within the non-type-specific pepsin-susceptible site and adjacent C repeat regions of M6 protein, evoke protective immunity against pharyngeal colonization by type 6 streptococci in a mouse model. It was necessary to det. whether more highly conserved M protein epitopes elicit mucosal protection against **group A streptococci**, and if protective immunity extends to heterologous serotypes. In this report, peptides were synthesized that correspond to sequences completely contained within the highly conserved C repeat region of M6 protein. Peptide Ag were covalently coupled to the mucosal adjuvant, **cholera toxin** B subunit (CTB), and mice immunized intranasally and orally with peptide-CTB conjugates were compared to control groups that received CTB only. Immunization with the peptide-CTB conjugates led to significant protection against pharyngeal colonization by **group A streptococci**. Protection was obsd. against the heterologous M serotype, type 14. Thus, protection against multiple serotypes of **group A streptococci** can be achieved with a vaccine consisting of the widely shared C repeat region of M6 protein.

L2 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1988:609291 CAPLUS
DOCUMENT NUMBER: 109:209291
TITLE: Influence of intranasal immunization with synthetic peptides corresponding to conserved epitopes of M protein on mucosal colonization by **group A streptococci**
AUTHOR(S): Bessen, Debra; Fischetti, Vincent A.
CORPORATE SOURCE: Rockefeller Univ., New York, NY, 10021, USA
SOURCE: Infect. Immun. (1988), 56(10), 2666-72
CODEN: INFIBR; ISSN: 0019-9567
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A major virulence factor of **group A streptococci** is M protein, a surface-exposed fibrillar mol. of which there exist more than 80 distinct serol. types. Antigenic variability resides largely in the N-terminal region of M protein, whereas the C-terminal half of the mol. is highly conserved among different M serotypes. The authors sought to det. whether mucosal immunization with conserved epitopes of M protein influences the course of mucosal colonization by **group A streptococci** in a mouse model. Synthetic peptides corresponding to sequences in the conserved region of M protein were covalently linked to the mucosal adjuvant **cholera toxin** B subunit. Mice were immunized intranasally and then challenged intranasally with live streptococci. Pharyngeal colonization by streptococci was measured for up to 15 days

postchallenge. Mice immunized with synthetic peptides showed a redn. in colonization compared with the control group.

L2 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1986:205066 CAPLUS
DOCUMENT NUMBER: 104:205066
TITLE: Protective and nonprotective epitopes of chemically synthesized peptides of the amino terminal region of type 6 streptococcal M protein
AUTHOR(S): Beachey, Edwin H.; Seyer, Jerome M.
CORPORATE SOURCE: Veterans Adm. Med. Cent., Univ. Tennesee, Memphis, TN, 38104, USA
SOURCE: J. Immunol. (1986), 136(6), 2287-92
CODEN: JOIMA3; ISSN: 0022-1767
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The protective immunogenicity of chem. synthesized copies of the N-terminal region of type 6 streptococcal M protein was investigated. Four overlapping peptides were synthesized by copying residues 1-20, 10-20, 12-31, and 22-31. Rabbit antisera raised against whole cells of type 6 streptococci reacted at high dilns. (1/12,800 to 1/51,200) with S-M6(1-20) and S-M6(10-20), and at low dilns. (1/100-1/800) with S-M6(12-31) and S-M6(22-31), indicating that the N-terminal region of type 6 M protein bears immunodominant epitopes. When covalently linked to **tetanus toxoid** and emulsified in complete Freund's adjuvant, the synthetic peptides S-M6(1-20), S-M6(10-20), and S-M6(12-31), but not S-M6(22-31), evoked type-specific opsonic antibodies against type 6 streptococci. Although the immune sera reacted in low dilns. by ELISA with the heterologous M protein polypeptides pep M5, pep M19, and pep M24, they failed to opsonize the streptococci from which these M protein polypeptides were derived. Each of the immune sera reacted in high diln. by ELISA with the resp. immunizing peptides. All except those against S-M6(22-31) also reacted with pep M6. None of the immune sera reacted with human cardiac tissue or with muscle myosin. The pattern of the inhibition of opsonization by each of the synthetic peptides of each of the immune sera indicates the presence of at least 3 protective epitopes in the N-terminal region of type 6 M protein. These results indicate that the N-terminal region of type 6 M protein contains both protective and nonprotective epitopes, and chem. synthesized copies of this region lack cardiac tissue cross-reactive epitopes. These studies hold promise for the development of safe and effective vaccines against **group A streptococci**, esp. against the strains giving rise to rheumatic fever and rheumatic heart disease.

(FILE 'MEDLINE, BIOSIS, EMBASE, LIFESCI, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, TOXLIT, TOXLINE, PHIC, PHIN, BIOTECHDS' ENTERED
Searcher : Shears 308-4994

AT 12:43:56 ON 21 JAN 2000)
L3 55 S L2
L4 26 DUP REM L3 (29 DUPLICATES REMOVED)

L4 ANSWER 1 OF 26 SCISEARCH COPYRIGHT 2000 ISI (R)
ACCESSION NUMBER: 1999:275203 SCISEARCH
THE GENUINE ARTICLE: 182MY
TITLE: Protective immune response against Streptococcus pyogenes in mice after intranasal vaccination with the fibronectin binding protein SfbI
AUTHOR: Guzman C A (Reprint); Talay S R; Molinari G; Medina E; Chhatwal G S
CORPORATE SOURCE: GBF NATL RES CTR BIOTECHNOL, DEPT MICROBIAL PATHOGENICITY & VACCINE RES, DIV MICROBIOL, D-38124 BRAUNSCHWEIG, GERMANY (Reprint)
COUNTRY OF AUTHOR: GERMANY
SOURCE: JOURNAL OF INFECTIOUS DISEASES, (APR 1999) Vol. 179, No. 4, pp. 901-906.
Publisher: UNIV CHICAGO PRESS, 5720 SOUTH WOODLAWN AVE, CHICAGO, IL 60637-1603.
ISSN: 0022-1899.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; CLIN
LANGUAGE: English
REFERENCE COUNT: 42
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Despite the significant impact on human health of Streptococcus pyogenes, an efficacious vaccine has not yet been developed. Here, the potential as a vaccine candidate of a major streptococcal adhesin, the fibronectin-binding protein SfbI, was evaluated. Intranasal immunization of mice with either SfbI alone or coupled to **cholera toxin** B subunit (CTB) triggered efficient SfbI-specific humoral (mainly IgG) and lung mucosal (14% of total IgA) responses. CTB-immunized control mice were not protected against challenge with S. pyogenes (90%-100% lethality), whereas SfbI-vaccinated animals showed 80% and 90% protection against homologous and heterologous challenge, respectively. Multiple areas of consolidation with diffused cellular infiltrates (macrophages and neutrophils) were observed in lungs from control mice; the histologic structure was preserved in SfbI-vaccinated animals, which occasionally presented focal infiltrates confined to the perivascular, peribronchial, and subpleural areas. These results suggest that SfbI is a promising candidate for inclusion in acellular vaccines against S. pyogenes.

L4 ANSWER 2 OF 26 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1999328815 EMBASE
TITLE: Streptococcal toxic shock syndrome in two patients infected by a colonized surgeon.
Searcher : Shears 308-4994

AUTHOR: Rutishauser J.; Funke G.; Lutticken R.; Ruef C.
CORPORATE SOURCE: Dr. C. Ruef, Abt. Infektionskrank. Spitalhygiene, Universitatsspital Zurich, CH-8091 Zurich, Switzerland
SOURCE: Infection, (1999) 27/4-5 (259-260).
Refs: 10
ISSN: 0300-8126 CODEN: IFTNAL
COUNTRY: Germany
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
006 Internal Medicine
009 Surgery
025 Hematology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB The incidence of severe invasive infections caused by **Streptococcus** pyogenes, a **group A streptococcus** (GAS), has increased in the past 10 years. Most cases occur outside of the hospital setting. We report on two patients with nosocomial streptococcal toxic shock syndrome (StrepTSS). In patient 1 the syndrome was associated with the development of necrotizing fasciitis following inguinal hernia repair. Patient 2 suffered from StrepTSS shortly after receiving a tetanus vaccine in her left deltoid. Epidemiologic investigations of these cases, which were noted within 48 hours of each other, showed that the same surgeon performed the vaccination on patient 2 after assisting a colleague during the hernia repair procedure on patient 1. He was found to be a nasal carrier of GAS. All GAS isolates from the patients and the surgeon were indistinguishable by pulsed field gel electrophoresis. PCR analysis demonstrated the presence of streptococcal pyogenic exotoxins A and F. All strains were of the T-1 serotype and possessed the gene for M-protein 1. This report demonstrates that a virulent strain of GAS may be spread by asymptomatically colonized medical personnel via the air route.

L4 ANSWER 3 OF 26 LIFESCI COPYRIGHT 2000 CSA
ACCESSION NUMBER: 97:112251 LIFESCI
TITLE: Psoriasis vulgaris, streptococci and the immune system: A riddle to be solved soon?
AUTHOR: Prinz, J.C.
CORPORATE SOURCE: Dep. Dermatol., Univ. Munich, Frauenlobstr. 9-11, D-80337 Munich, FRG
SOURCE: SCAND. J. IMMUNOL., (19970600) vol. 45, no. 6, pp. 583-586.
ISSN: 0300-9475.
DOCUMENT TYPE: Journal
TREATMENT CODE: General Review
FILE SEGMENT: F; J

Searcher : Shears 308-4994

LANGUAGE: English

AB Psoriasis vulgaris, roughly translated as vulgar scaling, is a complex inflammatory skin disease that affects approximately 2% of the Western population. It presents with a characteristic type of skin lesions that appear as sharply demarcated reddish plaques of variant size covered with intensive silvery scaling. In a significant proportion of patients (>10%) psoriasis also involves the joints, sometimes leading to severe arthritis. Psoriasis has been recognized since ancient times, but it was only after 1800 that it was clearly distinguished from leprosy. Since then its pathophysiology has been an intellectual challenge and has stimulated a large variety of experimental investigations. All attempts to explain the aetiology of psoriasis, however, faced a major problem: they had to integrate into a conclusive pathophysiological concept a particular combination of seemingly unrelated features that are unique for psoriasis: keratinocytes in psoriatic skin lesions show a reversible state of excessive hyperproliferation thus giving rise to increased epidermal turnover and scaling; neutrophilic granulocytes accumulate in the upper epidermal layers where they form small intra-epithelial abscesses; increased numbers of activated mast cells are observed in lesional dermis; skin lesions harbour a dense lesional infiltrate of mononuclear cells with numerous activated T lymphocytes that exocytose from dermis into epidermis; and psoriasis manifestations are often provoked by throat infections with **group A** beta-haemolytic **streptococci**. These changes are manifested against a strong yet polygenetic hereditary background: besides several gene loci inconsistently associated with psoriasis, an immunogenetic predisposition is most evident. Several HLA-molecules of the class I (Cw6, B13, Bw57) and class II locus (DR 7) were observed to confer a particular risk for psoriasis. This HLA-association was recognized in 1972 and indicated for the first time that psoriasis was not due to formerly suspected inherited defects in keratinocyte growth regulation, neutrophil function, mediators of inflammation, etc., but rather involved immunological mechanisms. Further observations soon corroborated this supposition. Infiltration of activated T lymphocytes was found to precede the eruption of psoriatic skin lesions, and a decrease in the density of infiltrating T-cells is a sensitive indicator for disease resolution. In the dermis, the majority of infiltrating T-cells are CD4 super(+), while T-cells infiltrating into the dermis predominantly belong to the CD8 super(+) subset. Many of the activated T-cells observed in psoriatic dermis are closely associated with dendritic cells expressing MHC class II molecules. Furthermore, psoriasis exacerbations can be triggered by systemic application of the T-cell growth factor IL-2, or of IFN- alpha or IFN- beta . The disease can be transferred by, or resolves after, bone marrow transplantation and some immunosuppressive treatments are highly effective. In particular, the therapeutic efficacy of

T-cell selective immunosuppressive regimens such as ciclosporin, monoclonal CD4 antibodies or a lymphocyte-selective toxin composed of IL-2 and fragments of **diphtheria toxin** has demonstrated that the formation of psoriatic skin lesions crucially depends on activated T lymphocytes. Based on these findings, psoriasis has been regarded as a disease of abnormal keratinocyte proliferation that is induced by T lymphocytes. This conclusion raised several questions essential for a further understanding of psoriasis: how can T- cells transmit a disease that on first sight has so little to do with an immunologically mediated disorder, and how do these T-cells become activated in the skin of psoriasis patients?

L4 ANSWER 4 OF 26 MEDLINE
ACCESSION NUMBER: 97276227 MEDLINE
DOCUMENT NUMBER: 97276227
TITLE: Streptococcus pyogenes type 5 M protein is an antigen, not a superantigen, for human T cells.
AUTHOR: Degnan B; Taylor J; Hawkes C; O'Shea U; Smith J; Robinson J H; Kehoe M A; Boylston A; Goodacre J A
CORPORATE SOURCE: School of Clinical Medical Sciences (Rheumatology), University of Newcastle upon Tyne, United Kingdom.
SOURCE: HUMAN IMMUNOLOGY, (1997 Apr 1) 53 (2) 206-15.
Journal code: G9W. ISSN: 0198-8859.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199708
ENTRY WEEK: 19970804

AB M proteins are coiled-coil dimers expressed on **group A streptococcal** cell surfaces. They have an important role in host antistreptococcal immunity and in poststreptococcal autoimmune sequelae. Controversy has arisen regarding whether type 5 M proteins are superantigenic for human T cells. To investigate this, we have produced and tested M5 in the form of two novel recombinant proteins. We found no evidence of superantigenicity using either recombinant whole M5 protein (rM5) or recombinant pep M5 protein (rpepM5) to activate peripheral blood mononuclear cells (PBMC) from healthy adult volunteers. Short-term, rM5-specific T-cell lines from different subjects were uniformly self-APC restricted and showed no consistent pattern of TCR V beta usage. A synthetic peptide of M5 residues 217-237 was found to contain epitope(s) recognized by some rM5-specific human T cells. PBMC responses to rM5 and rpepM5 in 3- and 7-day proliferation assays were characteristic of antigenic rather than superantigenic stimulation. We conclude that type 5 M protein activates human T cells as a conventional antigen.

Searcher : Shears 308-4994

L4 ANSWER 5 OF 26 SCISEARCH COPYRIGHT 2000 ISI (R)
ACCESSION NUMBER: 97:459507 SCISEARCH
THE GENUINE ARTICLE: XD850
TITLE: Nasal lymphoid tissue, intranasal immunization, and compartmentalization of the common mucosal immune system
AUTHOR: Wu H Y (Reprint); Russell M W
CORPORATE SOURCE: UNIV ALABAMA, DEPT MICROBIOL, BOX 1, 845 19TH ST S, BIRMINGHAM, AL 35294 (Reprint)
COUNTRY OF AUTHOR: USA
SOURCE: IMMUNOLOGIC RESEARCH, (10 JUN 1997) Vol. 16, No. 2, pp. 187-201.
Publisher: HUMANA PRESS INC, 999 RIVERVIEW DRIVE SUITE 208, TOTOWA, NJ 07512.
ISSN: 0257-277X.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 88

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Mucosal application of vaccines with an appropriate adjuvant can induce immune responses at both systemic and mucosal sites, and therefore may prevent not only infectious disease, but also colonization at mucosal surfaces. Intranasal is more effective than intragastric immunization at generating earlier and stronger mucosal immune responses. Nasal lymphoid tissue (NALT) and its local draining lymph nodes may retain long-term immune memory. IgA isotype switching, and the differentiation and maturation of IgA antibody-secreting cells (ASC) may occur before these cells migrate out of NALT, whereas IgG ASC responses require passage of the cells through draining lymph nodes of the NALT. Knowledge of whether immune memory cells can recirculate to and reside in the inductive sites other than their origin after encountering antigen will be helpful for understanding the compartmentalization of the common mucosal immune system as well as for determining the best route for delivering a mucosal vaccine against a particular pathogen.

L4 ANSWER 6 OF 26 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 96290103 MEDLINE
DOCUMENT NUMBER: 96290103
TITLE: Mapping a conserved conformational epitope from the M protein of **group A streptococci**.
AUTHOR: Relf W A; Cooper J; Brandt E R; Hayman W A; Anders R F; Pruksakorn S; Currie B; Saul A; Good M F
CORPORATE SOURCE: Queensland Institute of Medical Research, Royal Brisbane Hospital, Australia.
SOURCE: PEPTIDE RESEARCH, (1996 Jan-Feb) 9 (1) 12-20.
Journal code: BE1. ISSN: 1040-5704.
Searcher : Shears 308-4994

PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199701
ENTRY WEEK: 19970104

AB The carboxyl terminus of the M protein of **group A streptococci** (GAS) is highly conserved and contains epitopes that have been shown to induce opsonic antibodies and protection against GAS infection. This region of the protein can also stimulate T cells, which can react in vitro with heart antigens. Since different segments of the carboxyl terminus may be involved in immunity to GAS and in the pathogenesis of autoimmune disease (rheumatic heart disease), it is important to precisely define critical epitopes. However, the M protein is known to be a coiled coil, and a critical immunodominant antibody-binding epitope within this region (peptide 145, a 20-mer with the sequence LRRDLDASREAKK-QVEKALE) is shown here to be conformational. Thus, small synthetic overlapping peptides of 8-12 amino acids in length that span peptide 145 (p145) were unable to capture antibodies present in p145-immune mouse sera or in endemic human sera, even though antibodies raised to these small peptides coupled to **diphtheria toxoid** could bind the smaller peptides and, in some cases, p145. A series of mutated peptides in which every residue of p145 was sequentially altered also failed to identify critical residues for antibody binding. We thus devised a strategy to produce chimeric peptides in which small peptides copying the M protein sequence were displayed within a larger 28-mer peptide derived from the sequence of the GCN4 leucine zipper DNA binding protein of yeast. A 12-amino-acid window of the p145 sequence was inserted into the GCN4 peptide in such a way as to preserve any potential helical structure. The window was moved along one residue at a time to give a series of peptides representing p145. Circular dichroism demonstrated that these larger chimeric peptides and p145, but not a shorter 12-mer peptide, displayed alpha-helical potential in 50% trifluoroethanol. Certain chimeric peptides efficiently captured antibodies specific for p145 and thus enabled us to map the minimal antibody-binding sequence. RRDLDASREAKK, referred to as J(1)2. The chimeric peptide containing this sequence, referred to as J2, was able to inhibit opsonization of GAS by human antisera containing anti-peptide 145 antibodies. The T-cell response from p145-immunized responder B10.BR mice to J2 and J(I)2 was much lower than the response to p145 and mapped to a different peptide.

L4 ANSWER 7 OF 26 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 93317378 MEDLINE
DOCUMENT NUMBER: 93317378
TITLE: Outbreak of pyogenic abscesses after

diphtheria and **tetanus**
toxoids and pertussis vaccination.

AUTHOR: Simon P A; Chen R T; Elliott J A; Schwartz B
CORPORATE SOURCE: Division of Field Epidemiology, Centers for Disease Control and Prevention, Atlanta, GA.
SOURCE: PEDIATRIC INFECTIOUS DISEASE JOURNAL, (1993 May) 12 (5) 368-71.
Journal code: OXJ. ISSN: 0891-3668.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199310

AB Nine children who received **diphtheria** and **tetanus**
toxoids and pertussis vaccine from the same vial at a clinic in Colorado developed pyogenic abscesses at the site of injection. Eight abscesses required surgical drainage and five children were hospitalized. **Group A Streptococcus**
(GAS) was cultured from eight wounds and Staphylococcus aureus was also isolated from four. Epidemiologic investigation revealed that within the hour of the first child's vaccination, three children had been diagnosed in the clinic with GAS pharyngitis. GAS recovered from repeat throat swabs from two of these children and the eight case-isolates were all serotype M-12, T-12 and had identical immunoblot patterns on sodium dodecyl sulfate-polyacrylamide gel electrophoresis. Laboratory simulation studies demonstrated that GAS can survive for at least 4 days on the external surface of a vaccine vial rubber stopper and contaminate needles inserted through the stopper. Swabbing the stopper with 70% isopropyl alcohol resulted in effective disinfection. To prevent potential contamination meticulous attention to sterile technique is important when withdrawing vaccine from multidose vaccine vials.

L4 ANSWER 8 OF 26 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 92113274 MEDLINE
DOCUMENT NUMBER: 92113274
TITLE: Epitopes of **group A**
streptococcal M protein that evoke cross-protective local immune responses.
AUTHOR: Bronze M S; Courtney H S; Dale J B
CORPORATE SOURCE: Department of Veterans Affairs Medical Center, Memphis, TN 38104..
CONTRACT NUMBER: AI-10085 (NIAID)
SOURCE: JOURNAL OF IMMUNOLOGY, (1992 Feb 1) 148 (3) 888-93.
Journal code: IFB. ISSN: 0022-1767.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals;
Searcher : Shears 308-4994

Cancer Journals
ENTRY MONTH: 199204
AB The present studies were undertaken to identify conserved epitopes of **group A streptococcal** M proteins that evoke cross-protective mucosal immune responses. Two synthetic peptides copying conserved regions of type 5 M protein, designated SM5(235-264)C and SM5(265-291)C, were covalently linked to carrier molecules and their immunogenicity was tested in laboratory animals. Rabbit antisera against both peptides cross-reacted with multiple serotypes of **group A streptococci**, indicating that the peptides contained broadly cross-reactive, surface exposed M protein epitopes. Serum antipeptide antibodies adsorbed to the surface of heterologous type 24 streptococci passively protected mice against intranasal challenge infections. Mice that were actively immunized intranasally with each synthetic peptide covalently linked to the B subunit of **cholera toxin** were protected against colonization and death after intranasal challenge infections with type 24 streptococci in the absence of serum opsonic antibodies. These data confirm and extend previous observations that conserved M protein epitopes evoke cross-protective local immunity and may serve as the basis for broadly cross-protective M protein vaccines.

L4 ANSWER 9 OF 26 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 92025759 EMBASE
DOCUMENT NUMBER: 1992025759
TITLE: Antibiotic treatment of pharyngitis.
AUTHOR: Kind A.C.; Williams D.N.
CORPORATE SOURCE: Section of Infectious Disease, Department of Medicine, Park Nicollet Medical Center, 5000 W 39th St, St Louis Park, MN 55416, United States
SOURCE: Seminars in Respiratory Infections, (1991) 6/2 (69-76).
ISSN: 0882-0546 CODEN: SRINES
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 004 Microbiology
011 Otorhinolaryngology
015 Chest Diseases, Thoracic Surgery and Tuberculosis
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

L4 ANSWER 10 OF 26 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 90338762 MEDLINE
DOCUMENT NUMBER: 90338762
TITLE: Synthetic peptide vaccine against mucosal colonization by **group A**

streptococci. I. Protection against a heterologous M serotype with shared C repeat region epitopes.

AUTHOR: Bessen D; Fischetti V A
CORPORATE SOURCE: Laboratory of Bacteriology and Immunology, Rockefeller University, New York, NY 10021..
CONTRACT NUMBER: AI-11822 (NIAID)
SOURCE: JOURNAL OF IMMUNOLOGY, (1990 Aug 15) 145 (4) 1251-6. Journal code: IFB. ISSN: 0022-1767.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 199011

AB M protein is an antigenically variable virulence determinant present on the surface of **group A streptococci**, and it provides the basis for the serologic typing scheme. Type-specific serum antibodies afford strong protection against infection by the homologous serotype. Non-type-specific antigenic epitopes also exist within the surface-exposed portion of M protein. Previous studies demonstrated that intranasal immunization with Ag corresponding to sequences within the non-type-specific pepsin-susceptible site and adjacent C repeat regions of M6 protein, evoke protective immunity against pharyngeal colonization by type 6 streptococci in a mouse model. Although the protective immunogens are not type-specific, the pepsin site region of M6 is shared among less than 20% of serotypes examined. Therefore it was necessary to determine whether more highly conserved M protein epitopes elicit mucosal protection against **group A streptococci**, and if protective immunity extends to heterologous serotypes. In this report, peptides were synthesized that correspond to sequences completely contained within the highly conserved C repeat region of M6 protein. Peptide Ag were covalently coupled to the mucosal adjuvant, **cholera toxin** B subunit (CTB), and mice immunized intranasally and orally with peptide-CTB conjugates were compared to control groups that received CTB only. Immunization with the peptide-CTB conjugates led to significant protection against pharyngeal colonization by **group A streptococci**. Furthermore, protection was observed against the heterologous M serotype, type 14. These findings suggest that protection against multiple serotypes of **group A streptococci** can be achieved with a vaccine consisting of the widely shared C repeat region of M6 protein.

L4 ANSWER 11 OF 26 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1990:364526 BIOSIS
DOCUMENT NUMBER: BR39:49002

TITLE: BACTERIAL TOXIN VACCINES.
AUTHOR(S): MCDONEL J L
CORPORATE SOURCE: DEP. BIOL., INDIANA UNIV. SOUTH BEND, SOUTH BEND, INDIANA 46634.
SOURCE: MIZRAHI, A. (ED.). ADVANCES IN BIOTECHNOLOGICAL PROCESSES, VOL. 13. BACTERIAL VACCINES. XIII+317P. WILEY-LISS: NEW YORK, NEW YORK, USA; CHICHESTER, ENGLAND, UK. ILLUS, (1990) 0 (0), 1-34. CODEN: ABIPDT. ISSN: 0736-2293. ISBN: 0-471-56219-X.
FILE SEGMENT: BR; OLD
LANGUAGE: English

L4 ANSWER 12 OF 26 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 88330191 MEDLINE
DOCUMENT NUMBER: 88330191
TITLE: Influence of intranasal immunization with synthetic peptides corresponding to conserved epitopes of M protein on mucosal colonization by **group A streptococci**.
AUTHOR: Bessen D; Fischetti V A
CORPORATE SOURCE: Rockefeller University, New York, New York 10021.
CONTRACT NUMBER: AI-11822 (NIAID)
SOURCE: INFECTION AND IMMUNITY, (1988 Oct) 56 (10) 2666-72. Journal code: GO7. ISSN: 0019-9567.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 198812

AB A major virulence factor of **group A streptococci** is M protein, a surface-exposed fibrillar molecule of which there exist more than 80 distinct serological types. Antigenic variability resides largely in the amino-terminal region of M protein, whereas the carboxy-terminal half of the molecule is highly conserved among different M serotypes. We sought to determine whether mucosal immunization with conserved epitopes of M protein influences the course of mucosal colonization by **group A streptococci** in a mouse model.
Synthetic peptides corresponding to sequences in the conserved region of M protein were covalently linked to the mucosal adjuvant **cholera toxin** B subunit. Mice were immunized intranasally with the peptide-**cholera toxin** B subunit conjugate or with **cholera toxin** B subunit alone and then challenged intranasally with live streptococci. Pharyngeal colonization by streptococci was measured for up to 15 days postchallenge. Mice immunized with synthetic peptides showed a significant reduction in colonization compared with the control group. The data demonstrate that immunity evoked by conserved portions of M protein influences the outcome of

group A streptococcal infection at the nasopharyngeal mucosa in a mouse model.

L4 ANSWER 13 OF 26 MEDLINE
ACCESSION NUMBER: 88261337 MEDLINE
DOCUMENT NUMBER: 88261337
TITLE: Distribution of IgG subclasses among human autoantibodies to Sm, RNP, dsDNA, SS-B and IgG rheumatoid factor.
AUTHOR: Yount W J; Cohen P; Eisenberg R A
CORPORATE SOURCE: Department of Medicine, University of North Carolina, Chapel Hill.
CONTRACT NUMBER: AM26574 (NIADDK)
AM34156 (NIADDK)
AM33887 (NIADDK)
+
SOURCE: MONOGRAPHS IN ALLERGY, (1988) 23 41-56.
Journal code: NHB. ISSN: 0077-0760.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198810

AB The IgG subclass distribution of human autoantibodies to Sm, double-stranded DNA (ds-DNA), ribonucleoprotein (RNP), SS-B (La), and IgG rheumatoid factor (RF) have been determined using sensitive ELISA or by indirect immunofluorescence on Crithidia lucilia in sera from patients with systemic lupus erythematosus (SLE), Sjogren's syndrome, and rheumatoid arthritis. For anti-Sm and anti-RNP, IgG1 was the predominant isotype. For anti-ds-DNA and anti-SS-B, IgG1 and a lesser contribution of IgG3 was found. In contrast, IgG1 and IgG4 were the predominant isotypes of human IgG RF. The preponderance of isotypes noted for these autoantibodies did not extend to the IgG subclass distribution for antibodies to trinitrophenol-bovine serum albumin (TNP), **tetanus toxoid** (Tet. tox.), pneumococcal polysaccharides (Pneumo), and **group A streptococcal** cell walls (Strep.). The restriction of human humoral responses as well as autoantibodies has both pathogenetic and immunoregulatory implications, and suggests that for these autoantibodies, T-cell-dependent responses, probably driven by antigen, are of importance.

L4 ANSWER 14 OF 26 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 88035459 MEDLINE
DOCUMENT NUMBER: 88035459
TITLE: Concentrations of antibodies in paired maternal and infant sera: relationship to IgG subclass.
AUTHOR: Einhorn M S; Granoff D M; Nahm M H; Quinn A; Shackelford P G

Searcher : Shears 308-4994

CORPORATE SOURCE: Edward Mallinckrodt Department of Pediatrics, Washington University School of Medicine, St. Louis, MO.
CONTRACT NUMBER: AI9350 (NIAID)
AI17962 (NIAID)
SOURCE: JOURNAL OF PEDIATRICS, (1987 Nov) 111 (5) 783-8.
Journal code: JLZ. ISSN: 0022-3476.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 198802

AB Previous studies comparing IgG subclass concentrations in cord and maternal sera have indicated that IgG1 is transported across the placenta to a greater extent than is IgG2. The purpose of our study was to examine the relationship between the transport of IgG1 and IgG2 and the transport of specific antibodies that are relatively restricted to a particular subclass, either IgG1 or IgG2. The concentrations of total serum IgG1 and IgG2 and those of IgG-anti-**tetanus toxoid** (TT) and anti-**group A streptococcal** carbohydrate (GAC) were measured in 30 paired maternal and cord sera. Previous studies have shown that anti-TT in adults is predominantly IgG1, whereas anti-GAC is predominantly IgG2. The mean cord/maternal concentration ratios of IgG1 and anti-TT were similar (1.77 +/- 0.56 and 1.93 +/- 0.67, respectively), but differed significantly (P = 0.0001) from those of IgG2 and anti-GAC (0.99 +/- 0.39 and 1.01 +/- 0.45, respectively). We confirmed the difference in cord/maternal concentration ratios of IgG1 and IgG2 antibodies by measuring IgG1 and IgG2 antibodies specific for Haemophilus influenzae type b capsular polysaccharide; the mean cord/maternal concentration ratio of IgG1-anti-Hib PS was significantly higher than that of IgG2-anti-Hib PS (2.23 +/- 0.83 compared with 0.94 +/- 0.49, P = 0.01). These results indicate that placental transport of IgG antibodies is related to their subclass composition.

L4 ANSWER 15 OF 26 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 87061158 EMBASE
DOCUMENT NUMBER: 1987061158
TITLE: Microbiology of human and animal bite wounds in children.
AUTHOR: Brook I.
CORPORATE SOURCE: Department of Pediatrics, Uniformed Services University of the Health Sciences, Bethesda, MD, United States
SOURCE: Pediatric Infectious Disease, (1987) 6/1 (29-32).
CODEN: PEIDEA
COUNTRY: United States

Searcher : Shears 308-4994

DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
007 Pediatrics and Pediatric Surgery
004 Microbiology
049 Forensic Science Abstracts
LANGUAGE: English

AB Aspirates from bite wounds in 39 children (21 with animal bites and 18 with human bites) were cultured for aerobic and anaerobic bacteria. Aerobic bacteria only were recovered in 7 (18%) wounds, anaerobic bacteria only in 3 (8%) and mixed aerobic and anaerobic bacteria in 29 (74%). A total of 59 isolates was recovered from animal bites (2.8/specimen): 37 aerobes (1.8/specimen); and 22 anaerobes (1.0/specimen). A total of 97 isolates were recovered from human bites (5.4/specimen): 44 aerobes (2.4/specimen); and 53 anaerobes (3.0/specimen). The most frequent isolates in both types of wounds were Staphylococcus aureus, anaerobic cocci and Bacteroides spp. Present only in animal bites were Pasteurella multocida, Pseudomonas fluorescens and M-5. Present only in human bites were **Group A streptococci**.
Eighteen beta-lactamase-producing organisms were isolated in 16 wounds. This study demonstrates the polymicrobial aerobic-anaerobic nature of human and animal bite wounds.

L4 ANSWER 16 OF 26 MEDLINE DUPLICATE 7
ACCESSION NUMBER: 86141821 MEDLINE
DOCUMENT NUMBER: 86141821
TITLE: Protective and nonprotective epitopes of chemically synthesized peptides of the NH2-terminal region of type 6 streptococcal M protein.
AUTHOR: Beachey E H; Seyer J M
CONTRACT NUMBER: AI-10085 (NIAID)
AI-13550 (NIAID)
AM-16506 (NIADDK)
SOURCE: JOURNAL OF IMMUNOLOGY, (1986 Mar 15) 136 (6) 2287-92.
Journal code: IFB. ISSN: 0022-1767.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 198606

AB The protective immunogenicity of chemically synthesized copies of the NH2-terminal region of type 6 streptococcal M protein was investigated. Four overlapping peptides were synthesized by copying residues 1-20, 10-20, 12-31, and 22-31. Rabbit antisera raised against whole cells of type 6 streptococci reacted at high dilutions (1/12,800 to 1/51,200) with S-M6(1-20) and S-M6(10-20), and at low dilutions (1/100-1/800) with S-M6(12-31) and S-M6(22-31), indicating that the NH2-terminal region of type 6 M protein bears

immunodominant epitopes. When covalently linked to **tetanus toxoid** and emulsified in complete Freund's adjuvant, the synthetic peptides S-M6(1-20), S-M6(10-20), and S-M6(12-31), but not S-M6(22-31), evoked type-specific opsonic antibodies against type 6 streptococci. Although the immune sera reacted in low dilutions by enzyme linked immunoabsorbent assay (ELISA) with the heterologous M protein polypeptides pep M5, pep M19, and pep M24, they failed to opsonize the streptococci from which these M protein polypeptides were derived. Each of the immune sera reacted in high dilution by ELISA with the respective immunizing peptides. All except those against S-M6(22-31) also reacted with pep M6. None of the immune sera reacted with human cardiac tissue by immunofluorescence or with muscle myosin by ELISA. The pattern of the inhibition of opsonization by each of the synthetic peptides of each of the immune sera indicates the presence of at least three protective epitopes in the NH2-terminal region of type 6 M protein. Our results indicate that the NH2-terminal region of type 6 M protein contains both protective and nonprotective epitopes, and chemically synthesized copies of this region lack cardiac tissue cross-reactive epitopes. These studies hold promise for the development of safe and effective vaccines against **group A streptococci**, especially against the strains giving rise to rheumatic fever and rheumatic heart disease.

L4 ANSWER 17 OF 26 MEDLINE
ACCESSION NUMBER: 86301529 MEDLINE
DOCUMENT NUMBER: 86301529
TITLE: Synthetic peptide fragments of streptococcal M proteins.
AUTHOR: Seyer J M; Dale J B; Beachey E H
CONTRACT NUMBER: AI-10085 (NIAID)
AI-13550 (NIAID)
AM16506 (NIADDK)
SOURCE: DEVELOPMENTS IN BIOLOGICAL STANDARDIZATION, (1986) 63 101-8.
Journal code: E7V. ISSN: 0301-5149.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198612
AB The surface M proteins of **group A streptococci** prevent phagocytosis by the non-immune host but antibodies subsequently developed against these M proteins opsonize the organism to allow phagocytosis and killing. In some cases, antibodies developed against M proteins are cross-reactive with host tissue and have been implicated in rheumatic fever. Peptide fragments of several serotypes, namely type 24, 5 and 6 M proteins were chemically synthesized and tested for their ability to induce

protective and tissue cross-reactive antibodies in rabbits. Two synthetic 35 residue peptides of type 24 M protein, S-CB3 and S-CB7 had previously been shown to evoke high ELISA titers as well as opsonic antibody titers in each of three rabbits. Neither contained host tissue cross-reactive antibodies when examined with human heart tissue. Subpeptides of CB7 were synthesized to identify the smallest protective epitope. Three synthetic subpeptides (S-CB7-(13-35), -(18-35) and - (23-35) C were covalently linked to **tetanus toxoid** and evoked opsonic antibodies in rabbits and thus protective immunity with no tissue cross-reactive epitopes. Synthetic peptides of the NH2-terminal region of peptide M 5, which is known to contain cardiac tissue cross-reactive epitopes, were also tested. When covalently linked to **tetanus toxoid**, the synthetic peptide S-M 5 (1-20), but not S-M5 (20-40), evoked antibodies which were protective against type 5 streptococci; no heart cross-reactive antibodies were evoked even when large excesses of the synthetic peptides were injected.(ABSTRACT TRUNCATED AT 250 WORDS)

L4 ANSWER 18 OF 26 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 85112378 MEDLINE
DOCUMENT NUMBER: 85112378
TITLE: Outbreaks of **group A streptococcal** abscesses following **diphtheria-tetanus toxoid** -pertussis vaccination.
AUTHOR: Stetler H C; Garbe P L; Dwyer D M; Facklam R R; Orenstein W A; West G R; Dudley K J; Bloch A B
SOURCE: PEDIATRICS, (1985 Feb) 75 (2) 299-303. Journal code: OXV. ISSN: 0031-4005.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198505
AB Two outbreaks of **group A streptococcal** abscesses following receipt of **diphtheria-tetanus toxoid**-pertussis (DTP) vaccine from different manufacturers were reported to the Centers for Disease Control (CDC) in 1982. The clustering of the immunization times of cases, the isolation of the same serotype of Streptococcus from all cases in each outbreak, and the absence of reported abscesses associated with receipt of the same lots of vaccine in other regions of the country, suggest that each outbreak was probably caused by contamination of a single 15-dose vial of vaccine. The preservative thimerosal was present within acceptable limits in unopened vials from the same lot of DTP vaccine in each outbreak. Challenge studies indicate that a strain of Streptococcus from one of the patients can survive up to 15 days in DTP vaccine at 4 degrees C. Contamination of vials during

manufacturing would have required survival of streptococci for a minimum of 8 months. Preservatives in multidose vaccine vials do not prevent short-term bacterial contamination. Options to prevent further clusters of streptococcal abscesses are discussed. The only feasible and cost-effective preventive measure now available is careful attention to sterile technique when administering vaccine from multidose vials.

L4 ANSWER 19 OF 26 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 85093165 EMBASE
DOCUMENT NUMBER: 1985093165
TITLE: Bacterial products as immunomodulating agents.
AUTHOR: Gialdroni-Grassi G.; Grassi C.
CORPORATE SOURCE: Cattedra di Chemioterapia, Istituto di Tisiologia e Malattie dell'Apparato Respiratorio, Universita di Pavia, I-27100 Pavia, Italy
SOURCE: International Archives of Allergy and Applied Immunology, (1985) 76/SUPPL. 1 (119-127).
CODEN: IAAAAM
COUNTRY: Switzerland
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
051 Leprosy and other Mycobacterial Diseases
026 Immunology, Serology and Transplantation
004 Microbiology
LANGUAGE: English

AB Immunomodulators or biological response modifiers (BRMs) are a series of products that have in common the capacity to modify immunological or, in a broader sense, biological responses. Recent investigations have shown the possible immunomodulating activity of monoclonal antibodies (anti-T cell, anti-T-suppressor cell, antitumor antibodies), antigens (tumor associated antigens, vaccines) and effector cells (macrophages, NK cells, etc.) and suggests that some of these agents may also qualify as BRMs. The mechanism of action of BRMs is largely unknown. The structure of some of them has been established, but the targets of their actions on the cells of the immune system still need clarification. Components of many bacteria and products of their metabolism have shown to be most potent immunomodulating agents. The attempts to identify and isolate the active principles from these products have frequently been successful and many of them are now produced by industrial laboratories. Many of these bacterial products are of low
d are now obtained by chemical synthesis as pure
f their mechanism of action have thus become
acterial fractions range among the microbial
th immunostimulant activity that have been most
. In fact BCG, the live, attenuated strain of
, besides its specific property to induce
tuberculosis, produces a generalized enhancement

of immune responsiveness against a great variety of antigen. Briefly, it can stimulate both humoral and cell-mediated immunity, the activity of phagocytic cells, the rejection of transplants and resistance to infections. C. parvum (Propionibacterium acnes) is a gram-positive organism which exhibits adjuvant activity in heat-killed and formaldehyde-treated suspension. The staphylococcal cell wall is the site of the most important virulence factors conditioning the severity of infection. All its major components, capsule, clumping factor, protein A, protein B, teichoic acid and peptidoglycan, possess a number of biological activities. Cell components of the **group A streptococci**
have several immunomodulating properties. Cell and cell wall preparations (peptidoglycan in particular) have an immunomodulating activity. The complete vaccine prepared from Bordetella pertussis possesses, in addition to its specific vaccine properties, adjuvant activity. This was realized through the observation that its administration, together with **diphtheria toxoid**,
resulted in higher levels of antitoxin antibodies. Brucella abortus injected intravenously is an inducer of interferon. Its extracts protect animals against viral infections and the implantation of experimental tumors. Bacillus subtilis spores stimulate mononuclear phagocytes and t lymphocytes, as shown by increased responses to Con A and PHA. An extract from K. pneumoniae serotype 2 showed both antibacterial and immunostimulant activity. Endotoxins of gram-negative bacteria can influence a great number of biological functions; above all, they stimulate host defense in a nonspecific way. Bacterial ribosomal vaccines are ribosome-rich subcellular extracts of micro-organisms which exert a protective effect against microbial and fungal infections.

L4 ANSWER 20 OF 26 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 83145831 EMBASE
DOCUMENT NUMBER: 1983145831
TITLE: Sore throats in adolescents.
AUTHOR: Schwartz R.H.; Wientzen R.L.; Grundfast K.M.
CORPORATE SOURCE: Dep. Pedi[illegible]r., Georgetown Univ. Hosp., Washington, DC
[illegible]ed States
SOURCE: [illegible]nfectious Disease, (1982) 1/6 (443-447).
[illegible]EA
[illegible]s

[illegible] Literature Index
[illegible]trics and Pediatric Surgery
[illegible]biology
[illegible]inolaryngology

DUPLICATE 9
[illegible]DLINE
[illegible]r : Shears 308-4994

DOCUMENT NUMBER: 83143664
TITLE: Streptococcal abscesses following **diphtheria -tetanus toxoid**-pertussis vaccination.
AUTHOR: Greaves W L; Hinman A R; Facklam R R; Allman K C; Barrett C L; Stetler H C
SOURCE: PEDIATRIC INFECTIOUS DISEASE, (1982 Nov-Dec) 1 (6) 388-90.
Journal code: PA4. ISSN: 0277-9730.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198306

AB Abscesses developed in seven children who received **diphtheria-tetanus toxoid**-pertussis vaccine at a clinic in Indiana. Epidemiologic investigation revealed that all seven children had received vaccine from the same multidose vial and had been vaccinated by the same nurse at the office of one physician. **Group A** beta-hemolytic **Streptococcus** was isolated from abscesses in six of the seven children. No source was identified as the cause of this cluster of abscesses. Vaccine of the same lot number used elsewhere was not associated with the development of abscesses. It appears that the vaccine became contaminated during use.

L4 ANSWER 22 OF 26 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 83015017 EMBASE
DOCUMENT NUMBER: 1983015017
TITLE: Scarlet fever, toxic-shock syndrome and the staphylococcus.
AUTHOR: Rahman A.N.; Rammelkamp C.H.
CORPORATE SOURCE: Dep. Med., Cleveland Metrop. Gen. Hosp. Cleveland, OH, United States
SOURCE: American Journal of the Medical Sciences, (1982) 284/3 (36-39).
CODEN: AJMSA
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
010 Obstetrics and Gynecology
004 Microbiology
LANGUAGE: English

AB A case of scarlet fever studied in 1959 and caused by Staphylococcus aureus, phage type 52/52a/80 infection of a surgical burn is reported. The literature is reviewed and data are presented which indicate the distinct antigenicity of the erythrogenic toxins of staphylococci and **group A streptococci** . The patient developed neutralizing antibodies to staphylococcal

toxin which disappeared ten months after infection. The similarity of the rashes and desquamation of the skin of several diseases caused by staphylococci indicate at least one common toxin.

L4 ANSWER 23 OF 26 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 76125908 EMBASE
DOCUMENT NUMBER: 1976125908
TITLE: [Immunosuppression by bacteria].
THE IMMUNE SYSTEM AND INFECTIOUS DISEASES.
AUTHOR: Schwab J.H.
CORPORATE SOURCE: Dept. Bacteriol. Immunol., Univ. North Carolina Sch. Med., Chapel Hill, N.C., United States
SOURCE: (1975) 4/- (64-75).
DOCUMENT TYPE: Book
FILE SEGMENT: 026 Immunology, Serology and Transplantation
004 Microbiology
LANGUAGE: English
AB The article deals with the role of bacterial components as exogenous environmental agents which modify the host's immunoregulatory systems. Most of the bacteria and bacterial products presented here as immunosuppressants are described in other papers, as immunoadjuvants. This emphasizes the important point that there are not classes of substances which inhibit immune cells and others which stimulate; rather, there are agents produced by bacteria which affect the interaction of cells in the immune response. As circumstances of dose, timing, antigen, etc. are varied, normal interaction of these cells is modified to increase, decrease or qualitatively change the production of antibodies or cell mediated immunity (CMI).

L4 ANSWER 24 OF 26 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1975:81518 BIOSIS
DOCUMENT NUMBER: BR11:81518
TITLE: SUPPRESSION OF THE IMMUNE RESPONSE BY MICROORGANISMS.
AUTHOR(S): SCHWAB J H
SOURCE: Bacteriol. Rev., (1975) 39 (2), 121-143.
CODEN: BAREA8. ISSN: 0005-3678.
FILE SEGMENT: BR; OLD
LANGUAGE: Unavailable

L4 ANSWER 25 OF 26 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 75075438 EMBASE
DOCUMENT NUMBER: 1975075438
TITLE: A health and seroepidemiological survey of a community in Barbados.
AUTHOR: Evans A.; Cox F.; Nankervis G.; et al.
CORPORATE SOURCE: Dept. Epidemiol., Yale Univ. Sch. Med., New Haven, Conn. 06510, United States
SOURCE: International Journal of Epidemiology, (1974) 3/2

(167-175).
CODEN: IJEPBF
DOCUMENT TYPE: Journal
FILE SEGMENT: 017 Public Health, Social Medicine and Epidemiology
026 Immunology, Serology and Transplantation
LANGUAGE: English

AB A health and serological study has been made on a random sample of households comprising 1,399 persons in Bridgetown, Barbados; serum samples were obtained on 1,118 or 80%. Pyoderma was present in 21% of 290 children under age 13 yr; **group A streptococci** were isolated from 44% of the lesions. Rubella antibody was present in only 43.4% and was essentially absent under age 13. In contrast, antibody to cytomegalovirus was found in 78.5% and to Epstein Barr virus in 95.2%; both antibodies were acquired early in life. Antitoxin levels to tetanus and diphtheria in children were at poorly protective levels in about 30% of children under 11 yr. Influenza antibody to A/Hongkong was present in 85% but was judged protective in only 24%. Dengue antibodies, present in 20%, were essentially confined to people aged over 20 yr, suggesting viral activity prior to 1951 and no outbreak since then. Preliminary tests for polio antibodies suggested poor levels despite an intensive immunization programme. A positive syphilis serology test was found in 7.7% of the population tested.

L4 ANSWER 26 OF 26 CONFSCI COPYRIGHT 2000 CSA
ACCESSION NUMBER: 82:27412 CONFSCI
DOCUMENT NUMBER: 82039431
TITLE: Age Relation of Human Antibody Response to **Streptococcal Group A** Carbohydrate and **Tetanus Toxoid** Antigens
AUTHOR: Nelson, S.J.; Shackelford, P.G.
CORPORATE SOURCE: Washington Univ. Sch. Med., St. Louis, MO, USA
SOURCE: In "Program and Abstracts of the 22nd Interscience Conference on Antimicrobial Agents and Chemotherapy", 1982, American Society for Microbiology, 1913 I St., NW, Washington, DC 20006 USA, Abstracts and program booklet $10.00 Poster.
Meeting Info.: 824 0266: 22nd Interscience Conference on Antimicrobial Agents and Chemotherapy (8240266). Miami Beach, FL. 4-6 Oct 82. American Society for Microbiology (ASM).
DOCUMENT TYPE: Conference
FILE SEGMENT: DCCP
LANGUAGE: UNAVAILABLE

FILE 'CAPLUS' ENTERED AT 12:47:44 ON 21 JAN 2000
L5 153 S L1(5A)INFECT?

Searcher : Shears 308-4994

L6 5 S L5 AND (POLYSACCHARID? OR POLY SACCHARID?)
L7 4 S L6 NOT L2

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1996:495470 CAPLUS
DOCUMENT NUMBER: 125:193357
TITLE: Influence of group A streptococcal **polysaccharide** on the PHA-induced proliferation of T-cells
AUTHOR(S): Bazanova, E. A.; Gnezditskaya, E. V.; Nesterenko, V. G.; Popova, L. K.; Sanina, V. Yu.; Ignatenko, I. N.
CORPORATE SOURCE: Gamaleya Research Institute of Epidemiology and Microbiology, Moscow, Russia
SOURCE: Zh. Mikrobiol., Epidemiol. Immunobiol. (1996), (2), 71-73
CODEN: ZMEIAV; ISSN: 0372-9311
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The influence of group A streptococcal **polysaccharide** (A-PS) on the proliferation and functional activity of CD4+ and CD8+ subpopulations of human peripheral blood lymphocytes was studied. A-PS, though having no mitogenic activity of its own, could influence the process of proliferation of the 2 main T-cell subpopulations in the presence of PHA. Its action has a regulatory character and is manifested by the maintenance of the ratio of CD4+ and CD8+ lymphocytes in the culture at a const. level (approximating 1). This effect is linked with changes in the functional activity of lymphocytes in both subpopulations. These properties identify A-PS as a pathogenic factor playing an important role in immunoregulatory disturbances in diseases connected with **infection** caused by **group A streptococci**.

L7 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1990:550651 CAPLUS
DOCUMENT NUMBER: 113:150651
TITLE: Suppression of cytotoxic cellular reactions by the production of antibodies to the rhamnose determinants of streptococcal group A **polysaccharide**, cross-reactive with the epithelial antigens of skin
AUTHOR(S): Bazanova, E. A.; Gnezditskaya, E. V.; Lyampert, I. M.; Borodiyuk, N. A.; Evseeva, L. F.; Spirina, G. V.; Asoskova, T. K.
CORPORATE SOURCE: NIIEM im. Gamalei, Moscow, USSR
SOURCE: Byull. Eksp. Biol. Med. (1990), 110(8), 170-2
CODEN: BEBMAE; ISSN: 0365-9615
DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Autoantibodies to the rhamnose determinants of bacterial **polysaccharide** cross-reactive with skin epithelial cell antigens were obtained in BALB/c mice immunized with pepsin-treated group A streptococci. These antibodies inhibited cytotoxic reactions assocd. with delayed hypersensitivity reactions to microbial antigens (BCG) in an autologous system. Antibodies to the group-specific determinants of the bacterial **polysaccharide** did not suppress the cytotoxic reactions. It is possible that they also prevented the inhibition of cytotoxic reactions by cross-reactive antibodies specific for the rhamnose determinants of the **polysaccharide**. The modulation of autoimmune processes by the **infection** with **streptococci** **group A** is discussed.

L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1988:202930 CAPLUS

DOCUMENT NUMBER: 108:202930

TITLE: Human antibodies to group A streptococcal carbohydrate. Ontogeny, subclass restriction, and clonal diversity

AUTHOR(S): Shackelford, Penelope G.; Nelson, Susan J.; Palma, Anne T.; Nahm, Moon H.

CORPORATE SOURCE: Sch. Med., Washington Univ., St. Louis, MO, 63110, USA

SOURCE: J. Immunol. (1988), 140(9), 3200-5
CODEN: JOIMA3; ISSN: 0022-1767

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To investigate immuno-incompetence to **polysaccharide** antigens (Ag) in young children, antibodies to the **polysaccharide** and protein Ag of Streptococcus pyogenes were studied. S. pyogenes Was chosen because it commonly causes natural infections and has well-characterized **polysaccharide** and protein Ag. In children over the age of 2 yr, the maturation of antibody responses to the **polysaccharide** Ag of S. pyrogenes (A-CHO) appeared to occur in parallel with, or even earlier, than the responses to streptococcal protein Ag. When antibodies to group A carbohydrate (A-CHO) were studied in detail, qual. differences between the antibodies of children and adults were demonstrated. Although anti-A-CHO antibodies of adults were strikingly restricted to the IgG2 subclass, those of children were found in both the IgG1 and IgG2 subclasses. In addn., the clonal diversity of IgG antibodies to A-CHO increased with age, and addnl. clonotypes were detectable in convalescent sera of some subjects of all ages after infection. Two cases with major addnl. clonotypes after **group A streptococcal** **infection** were studied in detail. In these 2 cases the addnl. clonotypes belonged to a different IgG subclass than the

previously dominant clonotypes, and the expression of the addnl. major clonotypes occurred in both IgG1 and IgG2 subclasses.

L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1986:146673 CAPLUS
DOCUMENT NUMBER: 104:146673
TITLE: Assay for antibodies to group C and G streptococcal carbohydrate by enzyme-linked immunosorbent assay
AUTHOR(S): Ayoub, Elia M.; Hawthorne, Thomas; Miller, Joelle
CORPORATE SOURCE: Coll. Med., Univ. Florida, Gainesville, FL, 32610, USA
SOURCE: J. Lab. Clin. Med. (1986), 107(3), 204-9
CODEN: JLCMAK; ISSN: 0022-2143
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An enzyme-linked immunosorbent technique was established for the assay of serum antibodies to the group C and G streptococcal group-specific carbohydrates. The antigens consisted of formamide-extd. purified **polysaccharides** conjugated to poly-L-lysine. By use of hyperimmune rabbit antisera to the streptococcal group-specific **polysaccharides** A, C, and G, a high degree of specificity was encountered for each of the antigens tested. Antibody titers to these antigens were then measured in sera of 100 normal individuals varying in age from newborn to 20 yr. The mean titer of these antibodies increased between the ages of 5 and 15 yr and leveled off thereafter. Assay of antibodies to the group A, C, G carbohydrates on sera of patients with antecedent **group A streptococcal infections** or rheumatic fever and their matched normal controls revealed elevated titers for the antibody to streptococcal group A carbohydrate only in the sera of these patients. These results support the specificity of these tests and suggest their potential usefulness for providing evidence for infection by the various streptococcal serogroups in humans.

(FILE 'MEDLINE, BIOSIS, EMBASE, LIFESCI, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, TOXLIT, TOXLINE, PHIC, PHIN, BIOTECHDS' ENTERED AT 12:49:35 ON 21 JAN 2000)

L8 72 S L6
L9 19 S L8 AND (VACCIN? OR IMMUNIS? OR IMMUNIZ?)
L10 19 S L9 NOT L3
L11 12 DUP REM L10 (7 DUPLICATES REMOVED)

=> d 1-12 ibib abs

L11 ANSWER 1 OF 12 MEDLINE
ACCESSION NUMBER: 97472830 MEDLINE
Searcher : Shears 308-4994

DOCUMENT NUMBER: 97472830
TITLE: Group A and group B streptococcal **vaccine** development. A round table presentation.
AUTHOR: Dale J B; Cleary P P; Fischetti V A; Kasper D L; Musser J M; Zabriskie J B
CORPORATE SOURCE: University of Tennessee, Memphis, USA.
SOURCE: ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY, (1997) 418 863-8.
Journal code: 2LU. ISSN: 0065-2598.
PUB. COUNTRY: United States
Conference; Conference Article; (CONGRESSES)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199802

AB The data presented above provide a broad overview of ongoing work to develop **vaccines** against **group A** and group B **streptococcal infections**. The encouraging results of human trials with conjugate group B **polysaccharide vaccines** suggest that this approach will lead to a safe and effective method for preventing these devastating infections in newborn infants. The results of preclinical studies of the various strategies to develop group A streptococcal **vaccines** are also encouraging. Whether one approach will be more advantageous or efficacious than another will need to await clinical trials. Nevertheless, we predict that in the next decade we will make significant strides in preventing streptococcal infections and their complications.

L11 ANSWER 2 OF 12 BIOSIS COPYRIGHT 2000 BIOSIS DUPLICATE 1
ACCESSION NUMBER: 1997:368181 BIOSIS
DOCUMENT NUMBER: PREV199799667384
TITLE: Streptococcal infections in adults.
AUTHOR(S): Harrison, Lee H.
CORPORATE SOURCE: Dep. Epidemiol. Med., Univ. Pittsburgh Graduate Sch. Public Health, Sch. Med., 521 Parran, 130 DeSoto St., Pittsburgh, 15261 USA
SOURCE: Current Opinion in Infectious Diseases, (1997) Vol. 10, No. 2, pp. 144-148.
ISSN: 0951-7375.
DOCUMENT TYPE: General Review
LANGUAGE: English

L11 ANSWER 3 OF 12 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1995-392815 [50] WPIDS
DOC. NO. CPI: C1995-169219
TITLE: New gp. A Streptococcal **polysaccharide** immunogenic compsns. - used for **immunising** mammals against infection by gp. A Streptococci and for prodn of antibodies.
Searcher : Shears 308-4994

DERWENT CLASS: B04 D16
INVENTOR(S): BLAKE, M S; MICHON, F; TAI, J Y; ZABRISKIE, J B; MICHON, F L
PATENT ASSIGNEE(S): (NAVA-N) NORTH AMERICAN VACCINE INC; (UYRQ) UNIV ROCKEFELLER
COUNTRY COUNT: 64
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9528960	A1	19951102	(199550)*	EN	66
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG					
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TT UA UG UZ VN					
AU 9522967	A	19951116	(199608)		
EP 754055	A1	19970122	(199709)	EN	
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
NO 9604413	A	19961217	(199709)		
FI 9604189	A	19961218	(199713)		
BR 9507400	A	19971007	(199746)		
JP 09512276	W	19971209	(199808)		61
KR 97702069	A	19970513	(199821)		
US 5866135	A	19990202	(199912)		
AU 709797	B	19990909	(199949)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9528960	A1	WO 1995-US4973	19950420
AU 9522967	A	AU 1995-22967	19950420
EP 754055	A1	EP 1995-916479	19950420
		WO 1995-US4973	19950420
NO 9604413	A	WO 1995-US4973	19950420
		NO 1996-4413	19961017
FI 9604189	A	WO 1995-US4973	19950420
		FI 1996-4189	19961018
BR 9507400	A	BR 1995-7400	19950420
		WO 1995-US4973	19950420
JP 09512276	W	JP 1995-527802	19950420
		WO 1995-US4973	19950420
KR 97702069	A	WO 1995-US4973	19950420
		KR 1996-705946	19961021
US 5866135	A	US 1994-231229	19940421
AU 709797	B	AU 1995-22967	19950420

FILING DETAILS:

Searcher : Shears 308-4994

PATENT NO	KIND		PATENT NO
AU 9522967	A	Based on	WO 9528960
EP 754055	A1	Based on	WO 9528960
BR 9507400	A	Based on	WO 9528960
JP 09512276	W	Based on	WO 9528960
KR 97702069	A	Based on	WO 9528960
AU 709797	B	Previous Publ.	AU 9522967
		Based on	WO 9528960

PRIORITY APPLN. INFO: US 1994-231229 19940421
AN 1995-392815 [50] WPIDS
AB WO 9528960 A UPAB: 19951215
The following are claimed: (A) an immunogenic compsn. comprises a gp. A **polysaccharide** of formula (I) and a carrier, whereby the compsn. provides protection in mammals against infection by gp. A Streptococcal bacteria. In (A), R = a terminal reducing L-rhamnose or D-GlcpNAc; n = a number sufficient to make the compsn. large enough and of a sufficient average mol. wt. to be immunogenic; (B) an immunogenic **polysaccharide**-protein conjugate comprising a gp. A **polysaccharide** of formula (II) covalently linked to a protein. m = a number sufficiently large to provide an immunogenic response to the beta-D-GlcpNAc residue glycosidically linked to position 3 of rhamnose as shown and which defines an epitope which induces the formation of bactericidal antibodies; (C) a **vaccine** for providing protection against infection by gp. A Streptococcus in mammals comprising a gp. A **polysaccharide** of formula (II) and a carrier; (D) an immunogenic conjugate mo. comprising a gp. A **polysaccharide** of formula (II) covalently linked to liposomes; (E) an immune compsn. for conferring passive immunity comprising bactericidal antibodies for gp. A Streptococcal bacteria, where the antibodies are produced by **immunising** an individual with an immunogenic compsn. as in (A)-(D); (F) a method of covalently linking a gp. A **polysaccharide** of formula (I) and a liposome comprising phosphatidylethanolamine (PE), comprising: (a) forming a liposome of PE, (b) activating (I) by reducing the terminal sugar and oxidising the reduced sugar to form a terminal aldehyde; (c) combining the activated (I) and the liposomes and covalently linking (I) to the liposomes by reductive amination; and (d) recovering the gp. A **polysaccharide**-liposome conjugate.

USE - The immunogenic compsns can be used for **immunising** a mammal against **infection** by **gp A Streptococcal** bacteria (claimed).
They can also be used for raising antibodies for diagnostic purposes or for passive **immunisation**. The immunogenic compsns are pref. used in a dose of 0.01-10 mug/kg, eg parenterally.

Searcher : Shears 308-4994

ADVANTAGE - The immunogenic compsns can produce antibodies with opsonophagocytic activity against gp A Streptococci.
Dwg.0/9

L11 ANSWER 4 OF 12 TOXLIT
ACCESSION NUMBER: 1996:31626 TOXLIT
DOCUMENT NUMBER: CA-124-066569C
TITLE: Group A streptococcal **polysaccharide** immunogenic compositions and methods.
AUTHOR: Blake MS; Zabriskie JB; Tai JY; Michon F
SOURCE: (1995). PCT Int. Appl. PATENT NO. 95 28960 11/02/95 (Rockefeller University).
PUB. COUNTRY: United States
DOCUMENT TYPE: Patent
FILE SEGMENT: CA
LANGUAGE: English
OTHER SOURCE: CA 124:66569
ENTRY MONTH: 199602
AB This invention provides a novel immunogenic compn. and **vaccine**, processes for producing them and methods for **immunization** against **infectious** and disease caused by **group A Streptococci**. The compns. include group A streptococcal **polysaccharide** covalently linked to protein or liposomes to form immunogenic conjugates. The method of **immunization** for this invention comprises administering to an individual an immunogenic amt. of group A **polysaccharide**. The group A **polysaccharide** may be administered as a **vaccine** either on its own, conjugated to proteins or conjugated to liposomes. Addnl., the group A **polysaccharides** may be assocd. with an adjuvant. This invention is particularly useful for providing both active and passive immunogenic protection for those populations most at risk of contracting **group A Streptococcal infections** and disease namely adults, pregnant women and in particular infants and children.

L11 ANSWER 5 OF 12 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 91152247 MEDLINE
DOCUMENT NUMBER: 91152247
TITLE: [Suppression of cytotoxic cellular reactions by the production of antibodies to rhamnose determinants of streptococcal group A **polysaccharide** cross-reacting with antigens of the skin epithelium]. Supressiia tsitotoksicheskikh kletochnykh reaktsii pri produktsii antitel k ramnoznym determinantam polisakharida streptokokka gruppy A, perekrestno-reagiruiushchikh s antigenami epiteliia kozhi.
AUTHOR: Bazanova E A; Gnezditskaia E V; Liampert I M;

Borodiiuk N A; Evseeva L F; Spirina G V; Asoskova T K

SOURCE: BIULLETEN EKSPERIMENTALNOI BIOLOGII I MEDITSINY, (1990 Aug) 110 (8) 170-2.
Journal code: A74. ISSN: 0365-9615.
PUB. COUNTRY: USSR
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199106

AB By the BALB/c mice after different periods of **immunization** with the streptococci group A, treated with pepsin, antibodies belonging to autoantibodies to the determinants (DT) of **polysaccharide** (A-PS), cross-reactive (CR) with the epithelial skin cells, were investigated. In one of the mice groups, in the autologous system, on the target cells--macrophages of lymph nodes, the suppression of cytotoxic (CT) reactions was obtained. The CR are bound with the delayed type hypersensitivity appearing after the sensibilization with BCG. The suppression effect correlate (z-0.95) with the presence in the sera antibodies to the rhamnose DT'S of A-PS, which cross-react with the cells of basal and superbasal layers of skin epithelium. Antibodies to the group specific of the A-PS, cross-react only with the basal skin layer and not produce the suppression of CT reactions. It is possible that they also prevent the suppression of CT reactions, bound with the CR antibodies to the rhamnose DT-S of A-PS. The obtained data corroborate the earlier supposition that the autoantibodies to the CR DT'S of A-PS reacting with the skin epithelial cells as a rule common the thymus epithelial cells. It is possible that different IRD'S can prevent or stimulate the development of autoimmune processes by the **infections** with the **streptococci group A**.

L11 ANSWER 6 OF 12 LIFESCI COPYRIGHT 2000 CSA

ACCESSION NUMBER: 94:85838 LIFESCI

TITLE: The suppression of cytotoxic cellular reactions by the production of antibodies to the rhamnose determinants of Streptococcal group A **polysaccharide**, cross-reactive with the epithelial antigens of skin

AUTHOR: Basanova, E.A.; Gnezditskaya, E.V.; Lyampert, I.M.; Borodiyuk, N.A.; Evseeva, L.F.; Spirina, G.V.; Asoskova, T.K.

SOURCE: BYULL. EKSP. BIOL. MED., (1990) vol. 110, no. 8, pp. 170-172.
DOCUMENT TYPE: Journal
FILE SEGMENT: J
LANGUAGE: Russian
SUMMARY LANGUAGE: English

AB By the BALB/c mice after different periods of **immunization**

with the streptococci group A, treated with pepsin, antibodies belonging to autoantibodies to the determinants (DT) of **polysaccharide** (A-PS), cross-reactive (CR) with the epithelial skin cells, were investigated. In one of the mice groups, in the autologous system, on the target cells - macrophages of lymph nodes, the suppression of cytotoxic (CT) reactions was obtained. The CR are bound with the delayed type hypersensitivity appearing after the sensibilization with BCG. The suppression effect correlate (z-0,95) with the presence in the sera antibodies to the rhamnose DT'S of A-PS, which cross-react with the cells of basal and superbasal layers of skin epithelium. Antibodies to the group specific of the A-PS, cross-react only with the basal skin layer and not produce the suppression of CT reactions. It is possible that they also prevent the suppression of CT reactions, bound with the CR antibodies to the rhamnose DT-S of A-PS. The obtained data corroborate the earlier supposition that the autoantibodies to the CR DT'S of A-PS reacting with the skin epithelial cells as a rule common the thymus epithelial cells. It is possible that different IRD's can prevent or stimulate the development of autoimmune processes by the **infections** with the **streptococci group A**.

L11 ANSWER 7 OF 12 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 90021982 MEDLINE
DOCUMENT NUMBER: 90021982
TITLE: [Autoantibodies to different layers of epidermis during **immunization** of BALB/c mice with a culture of Group A Streptococcus treated with pepsin].
Autoantitela k razlichnym sloiam epidermisa pri **immunizatsii** myshei linii BALB/c kul'turoi Streptokokka gruppy A, obrabotannoi pepsinom.
AUTHOR: Bazanova E A; Gnezditskaia E V; Borodiiuk N A; Pyt'eva EIu
SOURCE: ZHURNAL MIKROBIOLOGII, EPIDEMIOLOGII I IMMUNOBIOLOGII, (1989 Jun) (6) 86-90.
Journal code: Y90. ISSN: 0372-9311.
PUB. COUNTRY: USSR
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199001
AB As revealed in the indirect immunofluorescence test, antibodies to the cross-reacting group A streptococcal **polysaccharide** determinant (A-PS), common to the antigen of the basal cell layer of the epidermis, regularly occur at the end of the first cycle and disappear after further **immunization** of BALB/c mice with the pepsin-treated culture of group A streptococci. This model may be used for the study of antibodies to A-PS, cross-reacting with the

cells of the basal layer of the epidermis, in the development of the autoimmune process linked++ with **group A streptococcal infection**.

L11 ANSWER 8 OF 12 LIFESCI COPYRIGHT 2000 CSA
ACCESSION NUMBER: 89:107193 LIFESCI
TITLE: Autoantibodies to different epidermal layers in BALB/c mice **immunized** with the pepsin-treated culture of group A streptococci.
AUTHOR: Bazanova, E.A.; Gnezditskaya, E.V.; Borodiyuk, N.A.; Pytyeva, E.Yu.
SOURCE: ZH. MIKROBIOL. EPIDEMIOL. IMMUNOBIOL., (1989) no. 6, pp. 86-90.
DOCUMENT TYPE: Journal
FILE SEGMENT: J; F
LANGUAGE: Russian
SUMMARY LANGUAGE: English
AB As revealed in the indirect immunofluorescence test, antibodies to the cross-reacting group A streptococcal **polysaccharide** determinant (A-PS), common to the antigen of the basal cell layer of the epidermis, regularly occur at the end of the first cycle and disappear after further **immunization** of BALB/c mice with the pepsin-treated culture of group A streptococci. This model may be used for the study of antibodies to A-PS, cross-reacting with the cells of the basal layer of the epidermis, in the development of the autoimmune process linked with **group A streptococcal infection**.

L11 ANSWER 9 OF 12 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 89009810 MEDLINE
DOCUMENT NUMBER: 89009810
TITLE: Protective immunity evoked by locally administered group A streptococcal **vaccines** in mice.
AUTHOR: Bronze M S; McKinsey D S; Beachey E H; Dale J B
CORPORATE SOURCE: Veterans Administration Medical Center, Memphis, TN 38104.
CONTRACT NUMBER: AI-10085 (NIAID)
AI-13550 (NIAID)
AI-07238 (NIAID)
SOURCE: JOURNAL OF IMMUNOLOGY, (1988 Oct 15) 141 (8) 2767-70.
Journal code: IFB. ISSN: 0022-1767.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 198901
AB The present studies were undertaken to determine the pathogenicity of group A streptococci introduced intranasally (i.n.) into mice in

an attempt to mimic mucosal infections in humans and to determine the efficacy of streptococcal **vaccines** administered via the mucosal route. The LD50 of type 24 streptococci (M24 strep) administered i.n. was 3 x 10(4) CFU. Throat cultures were performed in M24 strep-inoculated mice. Of 11 mice that died, 9 had positive throat cultures 3 or 4 days after i.n. challenge, and of 9 mice that survived, only 1 had a positive throat culture, indicating an association between mucosal infection and death. Postmortem examination performed on 35 mice that died after i.n. challenge showed that all had evidence of disseminated **infections**, and **group A streptococci** were recovered from the cervical lymph nodes, blood, spleen, liver, and brain. To determine **vaccine** efficacy, heat-killed M24 strep or pep M24 were administered i.n. to groups of mice. Whole, heat-killed streptococci and pep M24 administered locally protected mice against death from i.n. challenge infections with homologous M24 strep. The whole cell **vaccine** also protected against i.n. challenge infections with heterologous type 6 streptococci. Our data suggest that streptococcal **vaccines** administered locally evoke protective immunity against streptococcal infections.

L11 ANSWER 10 OF 12 JICST-EPlus COPYRIGHT 2000 JST
ACCESSION NUMBER: 870241922 JICST-EPlus
TITLE: Fundamental studies on the measurement of antibody against C-**polysaccharide** extracted from cell walls of group A streptococcus by the enzyme-linked immunosorbent assay (ELISA).
AUTHOR: TODOME YUKO; OHKUNI HISASHI; YOKOMURO KOZO KUDO ATSUSHI; KUDO SHINOBU
CORPORATE SOURCE: Nippon Medical School Kudoseikeigekahifukabyoin
SOURCE: Kansenshogaku Zasshi (Journal of the Japanese Association for Infectious Diseases), (1987) vol. 61, no. 1, pp. 54-63. Journal Code: Z0760A (Fig. 7, Tbl. 1, Ref. 11)
ISSN: 0387-5911
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New
AB Although there are several tools for serological diagnosis of **group A streptococcal infection** or its sequelae, the serological reactions are related to the extracellular products of group A streptococcus. Therefore, it is considered worthy to investigate the method of determination of antibodies in human sera to the group-specific **polysaccharide** (C-**polysaccharide**, C-poly.) which is one of the somatic antigen of group A streptococcus. Recently, passive hemagglutination test has been utilized on the measurement

of anti-C-poly antibody. The present paper describes the fundamental studies on the measurement of the antibody against C-poly in the **immunized** rabbit or human sera using the enzyme-liked immunosorbent assay (ELISA) technique. The purified C-poly antigen was extracted from cell walls of group A streptococcus. The C-poly was coupled with poly-L-lysine (PLL) using cyanuric chloride as coupling agent. The C-poly-PLL antigen was coated to microplate wells.(abridged author abst.)

L11 ANSWER 11 OF 12 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1985:407104 BIOSIS
DOCUMENT NUMBER: BA80:77096
TITLE: THE USE OF ELISA ENZYME-LINKED IMMUNOSORBENT ASSAY FOR DETECTING STREPTOCOCCAL GROUP A **POLYSACCHARIDE** ANTIBODIES IN HUMAN SERA.
AUTHOR(S): KOLESNIKOVA V YU; ANOKHINA G I; ZAKHAROVA N A; LYAMPERT I M
CORPORATE SOURCE: N.F. GAMALEYA RES. INST. EPIDEMIOL. MICROBIOL., ACAD. MED. SCI. USSR, MOSCOW, USSR.
SOURCE: BYULL EKSP BIOL MED, (1985) 99 (2), 181-183. CODEN: BEBMAE. ISSN: 0365-9615.
FILE SEGMENT: BA; OLD
LANGUAGE: Russian

AB Use was made of the ELISA [enzyme-linked immunosorbent assay] to develop a highly sensitive quantitative method for detecting antibodies against Streptococcal group A **polysaccharide** (**polysaccharide** A) in human sera. The main advantage is that one can use only 1 optimal dilution of the sera together with the reference serum. Sera of 53 healthy volunteers and 77 patients with a history of **Streptococcal group A infections** were screened for the presence of **polysaccharide** A antibodies. Highly reproducible results were obtained in 97% of cases. The specificity of the method was shown with the **polysaccharide** A-induced inhibition of the reaction. Positive reactions obtained with the tested sera in gel immunodiffusion correlated with the data derived by ELISA. Using the latter high level of specific antibodies was found in some of the sera that yielded negative reactions when tested by gel **immunization**. This may be associated with the presence of non-precipitating antibodies.

L11 ANSWER 12 OF 12 BIOSIS COPYRIGHT 2000 BIOSIS DUPLICATE 5
ACCESSION NUMBER: 1978:227189 BIOSIS
DOCUMENT NUMBER: BA66:39686
TITLE: PREVENTION THROUGH **IMMUNIZATION** NEW OPPORTUNITIES OR END OF THE ROAD.
AUTHOR(S): KRAUSE R M
CORPORATE SOURCE: NALT. INST. ALLERGY INFECT. DIS., NATL. INST. HEALTH, BETHESDA, MD. 20014, USA.

Searcher : Shears 308-4994

SOURCE: J INFECT DIS, (1977) 135 (2), 318-329.
CODEN: JIDIAQ. ISSN: 0022-1899.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB This review of **immunization** for prevention of human bacterial infection discusses the following topics: prospects for **immunization** against **group A** **streptococcal** and gonococcal **infections**; prospects for **immunization** with purified bacterial **polysaccharide** capsular **vaccines**; and prospects for alternate means (e.g., genetic) to manipulate the immune system.

FILE 'CAPLUS' ENTERED AT 12:53:45 ON 21 JAN 2000
L12 242 S L(W)RHAP
L13 3 S LRHAP
L14 5 S L1 AND (L12 OR L13)
L15 5 S L14 NOT (L2 OR L7)

L15 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1994:436021 CAPLUS
DOCUMENT NUMBER: 121:36021
TITLE: Convergent synthesis of an elusive hexasaccharide corresponding to the cell-wall polysaccharide of the .beta.-hemolytic **Streptococcus Group A**
AUTHOR(S): Marino-Albernas, Jose R.; Harris, Shannon L.; Varma, Vikram; Pinto, B. Mario
CORPORATE SOURCE: Dep. Chem., Simon Fraser Univ., Burnaby, BC, V5A 1S6, Can.
SOURCE: Carbohydr. Res. (1993), 245(2), 245-57
CODEN: CRBRAT; ISSN: 0008-6215
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A convergent synthesis of a hexasaccharide corresponding to the cell-wall polysaccharide of the .beta.-hemolytic **Streptococcus Group A** is described. The strategy relies on the prepn. of a key linear trisaccharide unit .beta.-D-GlcpNAc-(1.fwdarw.3)-.alpha.-**L-Rhap** -(1.fwdarw.2)-.alpha.-**L-Rhap** which has previously resisted out efforts. The trisaccharide functions both as a glycosyl acceptor and donor to give an elusive hexasaccharide. This fully functionalized unit can serve, in turn, as a glycosyl acceptor or donor for the synthesis of higher-order structures. Deprotection gives a hitherto unknown hexasaccharide for use as a hapten in immunochem. studies. The characterization of all compds. by high-resoln. 1H and 113 C NMR spectroscopy is also described.

L15 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1992:470166 CAPLUS
Searcher : Shears 308-4994

DOCUMENT NUMBER: 117:70166
TITLE: Convergent synthesis of higher-order oligosaccharides corresponding to the cell-wall polysaccharide of the .beta.-hemolytic **Streptococci Group A** . A branched hexasaccharide hapten
AUTHOR(S): Reimer, Kerry B.; Harris, Shannon L.; Varma, Vikram; Pinto, B. Mario
CORPORATE SOURCE: Dep. Chem., Simon Fraser Univ., Burnaby, BC, V5A 1S6, Can.
SOURCE: Carbohydr. Res. (1992), 228(2), 399-414
CODEN: CRBRAT; ISSN: 0008-6215
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A convergent synthesis of a hexasaccharide I corresponding to the cell-wall polysaccharide of the .beta.-hemolytic **Streptococci Group A**, is described. The strategy relies on the prepn. of a key branched trisaccharide unit .alpha.-**L-Rhap**-(1.fwdarw.2)-[.beta.-D-GlcpNAc-(1.fwdarw.3)]-.alpha.-**L-Rhap** which functions both as a glycosyl acceptor and donor. The hexasaccharide is obtained after only 3 glycosylation reactions. This fully functionalized unit can serve, in turn, as a glycosyl acceptor or donor for the synthesis of higher-order structures. Deprotection gives a hexasaccharide for use as a hapten in immunochem. studies. The characterization of all compds. by high resoln. 1H and 13C NMR spectroscopy is also described.

L15 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1991:409166 CAPLUS
DOCUMENT NUMBER: 115:9166
TITLE: Oligosaccharides corresponding to the antigenic determinants of the .beta.-hemolytic **Streptococci Group A** . Part 3. Synthesis and NMR analysis of branched trisacchairde and pentasacchairde haptens of the .beta.-hemolytic **Streptococci Group A** and the preparation of synthetic antigens
AUTHOR(S): Pinto, B. Mario; Reimer, Kerry B.; Tixidre, Arlette
CORPORATE SOURCE: Dep. Chem., Simon Fraser Univ., Burnaby, BC, V5A

1S6, Can.
SOURCE: Carbohydr. Res. (1991), 210, 199-219
CODEN: CRBRAT; ISSN: 0008-6215
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis of branched trisaccharide and pentasaccharide portions of the cell-wall polysaccharide of the .beta.-hemolytic **Streptococci group A** is described. The key disaccharide acceptors, allyl or 8-(methoxycarbonyl)octyl 3-O-(3,4,6-tri-O-benzyl-2-deoxy-2-phthalimido-.beta.-D-glucopyranosyl)-4-O-benzyl-.alpha.-L-rhamnopyranoside, in conjunction with a selectively blocked .alpha.-L-rhamnopyranosyl chloride under Koenigs-Knorr conditions, afforded the branched trisaccharides in 81 and 62% yield, resp. Analogously, glycosylation of the 8-(methoxycarbonyl)octyl disaccharide with a protected .beta.-D-GlcpNAc(1.fwdarw.3)-.alpha.-**L-Rhap**-(1.fwdarw.3)-.alpha.-**L-Rhap** chloride gave the pentasaccharide in 43% yield. The key disaccharide acceptors were obtained, in turn, from the allyl or 8-(methoxycarbonyl)octyl rhamnoside acceptors and 3,4,6-tri-O-benzyl-2-deoxy-2-phthalimido-.beta.-D-glucopyranosyl chloride under Koenigs-Knorr conditions. The latter glycosyl donor has not been described previously. Removal of the protecting groups afforded the trisaccharide haptens as their 1-Pr and 8-(methoxycarbonyl)octyl glycosides and the pentasaccharide as its 8-(methoxycarbonyl)octyl glycoside. Prepn. of the synthetic antigens followed coupling of the 8-(methoxycarbonyl)octyl glycosides to bovine serum albumin via the acyl azide intermediates.

L15 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1989:57966 CAPLUS
DOCUMENT NUMBER: 110:57966
TITLE: Synthesis of oligosaccharides corresponding to the antigenic determinants of the .beta.-haemolytic **Streptococci Group A**. Part 1. Overall strategy and synthesis of a linear trisaccharide
AUTHOR(S): Reimer, Kerry B.; Pinto, B. Mario
CORPORATE SOURCE: Dep. Chem., Simon Fraser Univ., Burnaby, BC, V5A 1S6, Can.
SOURCE: J. Chem. Soc., Perkin Trans. 1 (1988), (8), 2103-11
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 110:57966
AB The overall strategy for the synthesis of higher-order oligosaccharides corresponding to the repeating unit of the cell-wall polysaccharide of the .beta.-hemolytic

Streptococci Group A is described. The trisaccharide, .beta.-D-GlcpNAc-(1.fwdarw.3)-.alpha.-**L-Rhap**-(1.fwdarw.3)-.alpha.-**L-Rhap** was prepd. by a series of Koenigs-Knorr reactions. The selectively protected rhamnose deriv., allyl 2-O-benzoyl-4-O-benzyl-.alpha.-L-rhamnopyranoside, reacted with 3,4,6-tri-O-acetyl-2-deoxy-2-phthalimido-.beta.-D-glucopyranosyl bromide to give the blocked disaccharide. Deallylation, followed by treatment with N,N-dimethyl(chloromethylene)ammonium chloride then gave the corresponding disaccharide chloride. In conjunction with the same rhamnose monosaccharide unit or 8-methoxycarbonyloctyl 2,4-di-O-benzyl-.alpha.-L-rhamnopyranoside, the synthesis of the blocked trisaccharide, as its allyl glycoside or its 8-methoxycarbonyloctyl glycoside, resp, was accomplished. Transesterification, followed by hydrazinolysis, selective N-acetylation, and hydrogenolysis afforded the pure trisaccharide, as its Pr glycoside or 8-methoxycarbonyloctyl glycoside, for use as a hapten in binding and NMR studies or for use in the prepn. of glycoconjugates, resp. Similar treatment of the blocked disaccharide afforded the hapten, .beta.-D-GlcpNAc-(1.fwdarw.3)-.alpha.-**L-Rhap**, as its Pr glycoside.

L15 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:	1988:187112 CAPLUS
DOCUMENT NUMBER:	108:187112
TITLE:	Structure of the serotype f polysaccharide antigen of Streptococcus mutans
AUTHOR(S):	Pritchard, David G.; Michalek, Suzanne M.; McGhee, Jerry R.; Furner, Raymond L.
CORPORATE SOURCE:	Dep. Microbiol., Univ. Alabama, AL, 35294, USA
SOURCE:	Carbohydr. Res. (1987), 166(1), 123-31 CODEN: CRBRAT; ISSN: 0008-6215
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB The structure of the serotype f polysaccharide antigen of S. mutans was detd. by methylation anal., periodate oxidn., and partial methanolysis, and the configuration of the anomeric linkages by 13C-NMR spectroscopy, indicating the trisaccharide repeating unit .fwdarw. 3)-.alpha.-**L-Rhap**-(1 .fwdarw. 2)-[.alpha.-D-Glcp-(1 .fwdarw. 3)]-.alpha.-**L-Rhap** -(1 .fwdarw.. The structure of the backbone of the polysaccharide was confirmed by demonstrating immunol. identity between the product of Smith degrdn. of the S. mutans serotype f antigen and the **group A**-variant **streptococcal** polysaccharide.

(FILE 'MEDLINE, BIOSIS, EMBASE, LIFESCI, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, TOXLIT, TOXLINE, PHIC, PHIN, BIOTECHDS' ENTERED AT 12:55:21 ON 21 JAN 2000)

Searcher : Shears 308-4994

L16 19 S L14
L17 19 S L16 NOT (L3 OR L10)
L18 9 DUP REM L17 (10 DUPLICATES REMOVED)

L18 ANSWER 1 OF 9 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 97017604 MEDLINE
DOCUMENT NUMBER: 97017604
TITLE: Efficient, convergent syntheses of oligosaccharide allyl glycosides corresponding to the **Streptococcus group A** cell-wall polysaccharide.
AUTHOR: Auzanneau F I; Forooghian F; Pinto B M
CORPORATE SOURCE: Department of Chemistry, Simon Fraser University, Burnaby, British Columbia, Canada.
SOURCE: CARBOHYDRATE RESEARCH, (1996 Sep 23) 291 21-41.
Journal code: CNY. ISSN: 0008-6215.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199704
ENTRY WEEK: 19970403

AB Convergent syntheses of di-, tri, tetra-, penta-, and hexa-saccharide allyl glycosides corresponding to the beta-hemolytic **Streptococcus Group A** cell-wall polysaccharide are described. The strategy relies on the preparation of related di- and tri-saccharide building blocks: beta-D-Glc pNAc-(1-3)-alpha-**L**-**Rhap** and alpha-**L**-**Rhap**-(1-2)-[(beta-D-Glc p NAc-(1-3)]-alpha-**L**-**Rhap**, which could be used either as glycosyl donors or acceptors in subsequent glycosylation reactions. The protecting groups were chosen to allow the selective removal of the allyl aglycon to access the intermediate glycosyl donors but also to allow their own removal without affecting the allyl group. The allyl group was intended for use in conjugation of the oligosaccharides to soluble protein carriers or solid supports for the preparation of antigens and immunoadsorbents, respectively.

L18 ANSWER 2 OF 9 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 93379951 MEDLINE
DOCUMENT NUMBER: 93379951
TITLE: Convergent synthesis of an elusive hexasaccharide corresponding to the cell-wall polysaccharide of the beta-hemolytic **Streptococcus group A**.
AUTHOR: Marino-Albernas J R; Harris S L; Varma V; Pinto B M
CORPORATE SOURCE: Department of Chemistry, Simon Fraser University, Burnaby, British Columbia, Canada..
SOURCE: CARBOHYDRATE RESEARCH, (1993 Jul 19) 245 (2) 245-57.
Searcher : Shears 308-4994

Journal code: CNY. ISSN: 0008-6215.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199312

AB A convergent synthesis of a hexasaccharide corresponding to the cell-wall polysaccharide of the beta-hemolytic **Streptococcus Group A** is described. The strategy relies on the preparation of a key linear trisaccharide unit beta-D-GlcpNAc-(1-->3)-alpha-**L-Rhap**-(1-->2)-alpha-**L-Rhap** which has previously resisted our efforts. The trisaccharide functions both as a glycosyl acceptor and donor to give an elusive hexasaccharide. This fully functionalized unit can serve, in turn, as a glycosyl acceptor or donor for the synthesis of higher-order structures. Deprotection gives a hitherto unknown hexasaccharide for use as a hapten in immunochemical studies. The characterization of all compounds by high-resolution 1H and 13C NMR spectroscopy is also described.

L18 ANSWER 3 OF 9 SCISEARCH COPYRIGHT 2000 ISI (R)
ACCESSION NUMBER: 93:44027 SCISEARCH
THE GENUINE ARTICLE: KH055
TITLE: SYNTHESIS AND IMMUNOCHEMISTRY OF CARBOHYDRATE ANTIGENS OF THE BETA-HEMOLYTIC **STREPTOCOCCUS GROUP-A**
AUTHOR: PINTO B M (Reprint)
CORPORATE SOURCE: SIMON FRASER UNIV, DEPT CHEM, BURNABY V5A 1S6, BC, CANADA (Reprint)
COUNTRY OF AUTHOR: CANADA
SOURCE: ACS SYMPOSIUM SERIES, (1993) Vol. 519, pp. 111-131. ISSN: 0097-6156.
DOCUMENT TYPE: General Review; Journal
LANGUAGE: ENGLISH
REFERENCE COUNT: 34
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Progress towards the synthesis of increasingly complex oligosaccharides corresponding to the cell-wall polysaccharide of the beta-hemolytic **Streptococcus Group A** is described. Strategies based on the preparation of a key branched trisaccharide unit, alpha-**L-Rhap**-(1-2)-[beta-D-GlcpNAc-(1-3)]-alpha-**L-Rhap**, or a linear trisaccharide unit, beta-D-GlcpNAc-(1-3)-alpha-**L-Rhap**-(1-3)-alpha-**L-Rhap**, each of which function as both a glycosyl acceptor and donor, have been pursued. Disaccharide, linear trisaccharide, and branched tri-, tetra-, penta- and hexasaccharides have been obtained. Furthermore, a convergent synthetic route, based on a fully functionalized branched trisaccharide block, has been developed. This route has potential

for the elaboration of even higher-order structures. The compounds have been obtained as their propyl and/or 8-methoxycarbonyloctyl glycosides. The latter compounds have been coupled to bovine serum albumin or horse hemoglobin to yield the corresponding glycoconjugates. Immunochemical studies employing the glycoconjugates and the panel of oligosaccharide haptens have served to characterize rabbit polyclonal and mouse monoclonal antibodies raised against the glycoconjugates or a killed bacterial vaccine, respectively. The branch point of the **Streptococcus Group A** antigen appears to be a crucial element of the epitope recognized by both polyclonal and monoclonal antibodies that are able to bind the native antigen. An IgM monoclonal antibody that recognizes an extended binding site has been identified as a suitable candidate for the design of immunodiagnostic reagents.

L18 ANSWER 4 OF 9 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 92405102 MEDLINE
DOCUMENT NUMBER: 92405102
TITLE: Convergent synthesis of higher-order oligosaccharides corresponding to the cell-wall polysaccharide of the beta-hemolytic **Streptococci group A**. A branched hexasaccharide hapten.
AUTHOR: Reimer K B; Harris S L; Varma V; Pinto B M
CORPORATE SOURCE: Department of Chemistry, Simon Fraser University, Burnaby, British Columbia, Canada..
SOURCE: CARBOHYDRATE RESEARCH, (1992 Apr 27) 228 (2) 399-414. Journal code: CNY. ISSN: 0008-6215.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199212
AB A convergent synthesis of a hexasaccharide corresponding to the cell-wall polysaccharide of the beta-hemolytic **Streptococci Group A** is described. The strategy relies on the preparation of a key branched trisaccharide unit alpha-**L-Rhap**-(1----2)-[beta-D-GlcpNAc-(1----3)]-alpha-**L-Rhap** which functions both as a glycosyl acceptor and donor. The hexasaccharide is obtained after only three glycosylation reactions. This fully functionalized unit can serve, in turn, as a glycosyl acceptor or donor for the synthesis of higher-order structures. Deprotection gives a hexasaccharide for use as a hapten in immunochemical studies. The characterization of all compounds by high resolution 1H- and 13C-n.m.r. spectroscopy is also described.

L18 ANSWER 5 OF 9 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 91347240 MEDLINE
DOCUMENT NUMBER: 91347240
TITLE: Synthesis and n.m.r. analysis of branched

trisaccharide and pentasaccharide haptens of the beta-hemolytic **streptococci group**
A and the preparation of synthetic antigens.

AUTHOR: Pinto B M; Reimer K B; Tixidre A

CORPORATE SOURCE: Department of Chemistry, Simon Fraser University, Burnaby, British Columbia, Canada..

SOURCE: CARBOHYDRATE RESEARCH, (1991 Mar 20) 210 199-219.
Journal code: CNY. ISSN: 0008-6215.

PUB. COUNTRY: Netherlands

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199112

AB The synthesis of branched trisaccharide and pentasaccharide portions of the cell-wall polysaccharide of the beta-hemolytic **Streptococci Group A** is described. The key dissaccharide acceptors, allyl or 8-(methoxycarbonyl)ocytol 3-O-(3,4,6-tri-O-benzyl-2-deoxy-2-phthalimido-beta-D-glucopyranosyl)-4-O -benzyl - alpha-L-rhamnopyranoside, in conjunction with a selectively blocked alpha-L-rhamnopyranosyl chloride under Koenigs-Knorr conditions, afforded the branched trisaccharides in 81 and 62% yield, respectively. Analogously, glycosylation of the 8-(methoxycarbonyl)octyl disaccharide with a protected beta-D-GlcpNAc-(1----3)-alpha-**L-Rhap** -(1----3)-alpha-**L-Rhap** chloride gave the pentasaccharide in 43% yield. The key disaccharide acceptors were obtained, in turn, from the allyl or 8-(methoxycarbonyl)octyl rhamnoside acceptors and 3,4,6-tri-O-benzyl-2-deoxy-2-phthalimido-beta-D-glucopyranosyl chloride under Koenigs-Knorr conditions. The latter glycosyl donor has not been described previously. Removal of the protecting groups afforded the trisaccharide haptens as their 1-propyl and 8-(methoxycarbonyl)octyl glycosides and the pentasaccharide as its 8-(methoxycarbonyl)octyl glycoside. The compounds have been subjected to detailed analysis by two-dimensional n.m.r. methods. Preparation of the synthetic antigens followed coupling of the 8-(methoxycarbonyl)octyl glycosides to bovine serum albumin via the acyl azide intermediates.

L18 ANSWER 6 OF 9 SCISEARCH COPYRIGHT 2000 ISI (R)

ACCESSION NUMBER: 91:256905 SCISEARCH

THE GENUINE ARTICLE: FJ294

TITLE: OLIGOSACCHARIDES CORRESPONDING TO THE ANTIGENIC DETERMINANTS OF THE BETA-HEMOLYTIC **STREPTOCOCCI GROUP-A** .3. SYNTHESIS AND NMR ANALYSIS OF BRANCHED TRISACCHARIDE AND PENTASACCHARIDE HAPTENS OF THE BETA-HEMOLYTIC **STREPTOCOCCI GROUP-A** AND THE PREPARATION OF SYNTHETIC ANTIGENS

AUTHOR: PINTO B M (Reprint); REIMER K B; TIXIDRE A

Searcher : Shears 308-4994

CORPORATE SOURCE: SIMON FRASER UNIV, DEPT CHEM, BURNABY V5A 1S6, BC, CANADA (Reprint)
COUNTRY OF AUTHOR: CANADA
SOURCE: CARBOHYDRATE RESEARCH, (1991) Vol. 210, No. MAR, pp. 199-219.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: PHYS; LIFE; AGRI
LANGUAGE: ENGLISH
REFERENCE COUNT: 27

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The synthesis of branched trisaccharide and pentasaccharide portions of the cell-wall polysaccharide of the beta-hemolytic **Streptococci Group A** is described. The key dissaccharide acceptors, allyl or 8-(methoxycarbonyl)octyl 3-O-(3,4,6-tri-O-benzyl-2-deoxy-2-phthalimido-beta-D-glucopyranosyl)-4-O-benzyl-alpha-L-rhamnopyranoside, in conjunction with a selectively blocked alpha-L-rhamnopyranosyl chloride under Koenigs-Knorr conditions, afforded the branched trisaccharides in 81 and 62% yield, respectively. Analogously, glycosylation of the 8-(methoxycarbonyl)octyl disaccharide with a protected beta-D-GlcpNAc-(1-->3)-alpha-**L-Rhap** -(1-->3)-alpha-**L-Rhap** chloride gave the pentasaccharide in 43% yield. The key disaccharide acceptors were obtained, in turn, from the allyl or 8-(methoxycarbonyl)octyl rhamnoside acceptors and 3,4,6-tri-O-benzyl-2-deoxy-2-phthalimido-beta-D-glucopyranosyl chloride under Koenigs-Knorr conditions. The latter glycosyl donor has not been described previously. Removal of the protecting groups afforded the trisaccharide haptens as their 1-propyl and 8-(methoxycarbonyl)octyl glycosides and the pentasaccharide as its 8-(methoxycarbonyl)octyl glycoside. The compounds have been subjected to detailed analysis by two-dimensional n.m.r. methods. Preparation of the synthetic antigens followed coupling of the 8-(methoxycarbonyl)octyl glycosides to bovine serum albumin via the acyl azide intermediates.

L18 ANSWER 7 OF 9 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1988:482676 BIOSIS
DOCUMENT NUMBER: BA86:113986
TITLE: SYNTHESIS OF OLIGOSACCHARIDES CORRESPONDING TO THE ANTIGENIC DETERMINANTS OF THE BETA-HEMOLYTIC **STREPTOCOCCI GROUP A** PART 1. OVERALL STRATEGY AND SYNTHESIS OF A LINEAR TRISACCHARIDE.
AUTHOR(S): REIMER K B; PINTO B M
CORPORATE SOURCE: DEP. CHEM., SIMON FRASER UNIV., BURNABY, B.C., CANADA V5A 1S6.
SOURCE: J CHEM SOC PERKIN TRANS I, (1988) 0 (8), 2103-2112. CODEN: JCPRB4. ISSN: 0300-922X.
FILE SEGMENT: BA; OLD

LANGUAGE: English

AB The overall strategy for the synthesis of higher-order oligosaccharides corresponding to the repeating unit of the cell-wall polysaccharide of the .beta.-haemolytic **Streptococci Group A** is described. The trisaccharide, .beta.-D-GlcpNAc-(1 .fwdarw. 3)-.alpha.-**L-Rhap**-(1 .fwdarw. 3)-.alpha.-**L-Rhap** has been synthesized by a series of Konigs-Knorr reactions. The selectively protected rhamnose derivative, allyl 2-O-benzoyl-4-O-benzyl-.alpha.-L-rhamnopyranoside, reacted with 3,4,6-tri-O-acetyl-2-deoxy-2-phthalimido-.beta.-D-glucopyranosyl bromide to give the blocked disaccharide. Deallylation, followed by treatment with N,N-dimethyl(chloromethylene)ammonium chloride then gave the corresponding disaccharide chloride. In conjunction with the same rhamnose monosaccharide unit or 8-methoxycarbonyloctyl 2,4-di-O-benzoyl-.alpha.-L-rhamnopyranoside, the synthesis of the blocked trisaccharide, as its allyl glycoside or its 8-methoxycarbonyloctyl glycoside, respectively, was accomplished. Transesterification, followed by hydrazinolysis, selective N-acetylation, and hydrogenolysis afforded the pure trisaccharide, as its propyl glycoside or 8-methoxycarbonyloctyl glycoside, for use as a hapten in binding studies and n.m.r. studies or for use in the preparation of glycoconjugates, respectively. Similar treatment of the blocked disaccharide afforded the hapten, .beta.-D-GlcpNAc-(1 .fwdarw. 3)-.alpha.-**LRhap**, as its propyl glycoside.

L18 ANSWER 8 OF 9 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 88002081 MEDLINE
DOCUMENT NUMBER: 88002081
TITLE: Structure of the serotype f polysaccharide antigen of Streptococcus mutans.
AUTHOR: Pritchard D G; Michalek S M; McGhee J R; Furner R L
CORPORATE SOURCE: Department of Microbiology, University of Alabama at Birmingham 35294.
CONTRACT NUMBER: DE-02670 (NIDR)
CA-13148 (NCI)
SOURCE: CARBOHYDRATE RESEARCH, (1987 Aug 15) 166 (1) 123-31.
Journal code: CNY. ISSN: 0008-6215.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198801

AB The structure of the serotype f polysaccharide antigen of Streptococcus mutans was determined by methylation analysis, periodate oxidation, and partial methanolysis, and the configuration of the anomeric linkages by 13C-n.m.r. spectroscopy, indicating the trisaccharide repeating unit----3)-alpha-**L-Rhap**-(1----2)-[alpha-D-Glcp-(1----3)]-alpha-**L-**+ ++**Rhap**

- (1----. The structure of the backbone of the polysaccharide was confirmed by demonstrating immunological identity between the product of Smith degradation of the S. mutans serotype f antigen and the **group A**-variant **streptococcal** polysaccharide.

L18 ANSWER 9 OF 9 LIFESCI COPYRIGHT 2000 CSA
ACCESSION NUMBER: 82:43846 LIFESCI
TITLE: Synthesis of p-nitrophenyl 3-O-(2-acetamido-2-deoxy-beta -D-glucopyranosyl)- alpha -L-rhamnopyranoside corresponding to a fragment of the **Streptococcus Group A** Cell Wall polysaccharide.
AUTHOR: Garegg, P.J.; Norberg, T.
CORPORATE SOURCE: Dep. Organ. Chem., Arrhenius Lab., Univ. Stockholm, S-106 91 Stockholm, Sweden
SOURCE: ACTA CHEM. SCAND., SER. B., (1982) vol. B36, no. 1, pp. 65-66.
DOCUMENT TYPE: Journal
FILE SEGMENT: J
LANGUAGE: English
AB The cell-wall of **Streptococcus Group A** bacteria has been reported to contain the polysaccharide depicted in this article. The disaccharide beta -D-GlcNAcp-(1 arrow right 3)-alpha -**L-Rhap** has now been synthesized in the form of the p-nitrophenyl glycoside 3, suitable for coupling to proteins. Studies on the antigenic properties of the disaccharide coupled to a protein will be performed.

(FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, LIFESCI, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, TOXLIT, TOXLINE, PHIC, PHIN, BIOTECHDS' ENTERED AT 12:58:32 ON 21 JAN 2000)

L19 1146 S TAI J?/AU
L20 413 S MICHON F?/AU
L21 38 S L19 AND L20
L22 1521 S L19 OR L20
L23 15 S L22 AND L1
L24 48 S L21 OR L23
L25 23 DUP REM L24 (25 DUPLICATES REMOVED)

_ Author(s)

L25 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 1
ACCESSION NUMBER: 1999:77590 CAPLUS
DOCUMENT NUMBER: 130:152551
TITLE: Modified immunogenic pneumolysin compositions as vaccines
INVENTOR(S): Minetti, Conceicao; **Michon, Francis**; Pullen, Jeffrey K.; Polvino-Bodnar, Maryellen; Liang, Shu-Mei; **Tai, Joseph Y.**
PATENT ASSIGNEE(S): North American Vaccine, Inc., USA
Searcher : Shears 308-4994

SOURCE: PCT Int. Appl., 116 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9903884	A2	19990128	WO 1998-US14716	19980721
WO 9903884	A3	19990408		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9884078	A1	19990210	AU 1998-84078	19980721
PRIORITY APPLN. INFO.:			US 1997-53306	19970721
			US 1998-73456	19980202
			US 1998-345697	19980202
			WO 1998-US14716	19980721

AB This invention relates to modified pneumolysin polypeptides that retain the immunogenic nature of pneumolysin but have reduced or undetectable hemolytic activity compared to native pneumolysin. The invention also provides a method for generating novel pneumolysin variants with these desired characteristic properties. The invention also provides immunogenic compns. useful as pharmaceutical compns. including vaccines in which non-toxic, modified pneumolysin is used to stimulate protective immunity against Streptococcus pneumoniae. The vaccines may be compns. in which the modified pneumolysin in conjugated to bacterial polysaccharides or may be carried on an attenuated viral vector. In addn., the invention also provides a method of using the non-toxic, modified pneumolysin toxoid in order to stimulate antibodies against Streptococcus pneumoniae in a treated individual which are then isolated and transferred to a second individual, thereby conferring protection against Streptococcus pneumoniae in the second individual. Prepd. and tested for immunogenicity were polypeptides pNVJ1, pNVJ20, pNVJ22, pNVJ45, pNVJ56, pNVJ103, pNVJ207, pNVJ111, and pNVJ211 and corresponding nucleic acid sequences.

L25 ANSWER 2 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1999:111018 BIOSIS
DOCUMENT NUMBER: PREV199900111018
TITLE: **Group a streptococcal**

Searcher : Shears 308-4994

polysaccharide immunogenic compositions and methods.
AUTHOR(S): Blake, M. S.; Zabriskie, J. B.; **Tai, J. Y.**; **Michon, F.**
CORPORATE SOURCE: New York, N.Y. USA
ASSIGNEE: NORTH AMERICAN VACCINE, INC.; THE ROCKEFELLER UNIVERSITY
PATENT INFORMATION: US 5866135 Feb. 2, 1999
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Feb. 2, 1999) Vol. 1219, No. 1, pp. 431-432.
ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English

L25 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 2
ACCESSION NUMBER: 1997:536921 CAPLUS
DOCUMENT NUMBER: 127:160683
TITLE: Expression of group B Neisseria meningitidis outer membrane (MB3) protein from yeast and vaccines
INVENTOR(S): **Tai, Joseph Y.**; Donets, Mikhail; Wang, Ming-der; Liang, Shu-Mei; Polvino-Bodnar, Maryellen; Minetti, Conceicao; **Michon, Francis**
PATENT ASSIGNEE(S): North American Vaccine, Inc., USA
SOURCE: PCT Int. Appl., 138 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9728273	A1	19970807	WO 1997-US1687	19970131
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9721158	A1	19970822	AU 1997-21158	19970131
EP 877816	A1	19981118	EP 1997-906470	19970131
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, IE, FI				
NO 9803474	A	19980930	NO 1998-3474	19980728
PRIORITY APPLN. INFO.:			US 1996-10972	19960201
			US 1996-20440	19960613

Searcher : Shears 308-4994

WO 1997-US1687 19970131

AB The present invention relates, in general, to a method for obtaining the outer membrane protein meningococcal group B porin proteins, in particular MB3, and fusion proteins thereof. In particular, the present invention relates to a method of expressing the outer membrane protein meningococcal group B porin proteins in yeast. The invention also relates to a method of high level expression of the above-mentioned proteins wherein the rate of protein expression is enhanced by substituting a nucleotide sequence for the 5' region of the gene encoding said protein wherein the sequence has been optimized for yeast codon usage. The invention also relates to a vaccine comprising group A meningococcal polysaccharide (GAMP), group B meningococcal polysaccharide (GBMP), and group C meningococcal polysaccharide (GCMP) antigens, together with a pharmaceutically acceptable carrier. The invention also relates to a method of inducing an immune response in a mammal, comprising administering the above-mentioned vaccine to a mammal in an amt. sufficient to induce an immune response.

L25 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 3
ACCESSION NUMBER: 1998:3733 CAPLUS
DOCUMENT NUMBER: 128:74069
TITLE: Phagocytic, serological, and protective properties of **streptococcal** **group A** carbohydrate antibodies
AUTHOR(S): Zabriskie, J. B.; Poon-King, T.; Blake, M. S.; **Michon, F.**; Yoshinaga, M.
CORPORATE SOURCE: Rockefeller Univ., New York, NY, 10021, USA
SOURCE: Adv. Exp. Med. Biol. (1997), 418(Streptococci and the Host), 917-919
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Sera from rabbits immunized with **group A** **streptococcal** carbohydrate (**group A** coupled with tetanus toxoid) were opsonic for a group A type 6 strain. Similar results were obtained with 3 other different M types. ELISA titers of less than 100,000 were non-phagocytic. The rabbit sera described above were able to protect mice challenged i.p. with **group A streptococcal** strains of 2 different M types. Thus, **group A** **streptococcal** antibodies promote phagocytosis of several different strains of A streptococci, and these antibodies passively protect against an in vivo mouse challenge model.

L25 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 4
ACCESSION NUMBER: 1998:3712 CAPLUS

DOCUMENT NUMBER: 128:74010
TITLE: Combination conjugate vaccines against multiple serotypes of group B streptococci
AUTHOR(S): **Michon, F.**; Fusco, P. C.; D'Ambra, A. J.; Laude-Sharp, M.; Long-Rowe, K.; Blake, S.; **Tai, J. Y.**
CORPORATE SOURCE: North American Vaccine, Inc., Beltsville, MD, USA
SOURCE: Adv. Exp. Med. Biol. (1997), 418(Streptococci and the Host), 847-850
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Immunity to group B streptococci (GBS) is correlated to the presence of antibodies to the capsular polysaccharides (CPS). Conjugation of type III CPS to the beta C protein results in high IgG titer to both components. Here, the authors have examd. the immunogenicity of capsular polysaccharides of four GBS serotypes (Ia, Ib, II, III) after conjugation to the beta C protein by reductive amination.

L25 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 5
ACCESSION NUMBER: 1998:3711 CAPLUS
DOCUMENT NUMBER: 128:87802
TITLE: Bactericidal activity elicited by the beta C protein of group B streptococci contrasted with capsular polysaccharides
AUTHOR(S): Fusco, P. C.; Perry, J. W.; Liang, S. M.; Blake, M. S.; **Michon, F.**; **Tai, J. Y.**
CORPORATE SOURCE: North American Vaccine, Inc., Beltsville, MD, USA
SOURCE: Adv. Exp. Med. Biol. (1997), 418(Streptococci and the Host), 841-845
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Here, the authors demonstrate antibody-dependent, complement-mediated bactericidal activity (BC) with group B streptococci, in the absence of phagocytes, using .beta. C protein antibodies. The BC activity correlating with .beta. C protein antibodies was inhibited by the purified .beta. C protein, as well as its capsular polysaccharide conjugate (CPS), demonstrating that, (1) the BC activity was directed against the .beta. antigen and (2) the conjugation of the protein to the CPS did not alter the antigenic domain responsible for BC activity.

L25 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 6
ACCESSION NUMBER: 1997:125183 CAPLUS
Searcher : Shears 308-4994

DOCUMENT NUMBER: 126:180878
TITLE: Preclinical evaluation of a novel group B meningococcal conjugate vaccine that elicits bactericidal activity in both mice and nonhuman primates
AUTHOR(S): Fusco, Peter C.; **Michon, Francis**; **Tai, Joseph Y.**; Blake, M. S.
CORPORATE SOURCE: North American Vaccine, Inc., Beltsville, MD, USA
SOURCE: J. Infect. Dis. (1997), 175(2), 364-372
CODEN: JIDIAQ; ISSN: 0022-1899
PUBLISHER: University of Chicago Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Group B meningococcal (GBM) conjugate vaccines were prepd. using chem. modified N-propionylated polysialic acid, from Escherichia coli K1 polysaccharide capsule, coupled by reductive amination to tetanus toxoid and purified recombinant GBM porin (rPorB). All conjugates elicited high antibody levels in mice with good booster responses. However, only rPorB conjugates elicited bactericidal activity specific against a broad spectrum of five different GBM serotypes. Bactericidal activity was completely inhibited by free N-propionylated polysaccharide. In baboons and rhesus monkeys, rPorB conjugates elicited high antibody titers, with IgG booster responses 9- to 15-fold higher than primary responses. Bactericidal activity increased 19- to 39-fold over preimmune values, using rabbit complement; increased bactericidal activity was also confirmed with human and monkey complement. IgG cross-reactivity for unmodified N-acetyl polysaccharide was <5% for 79% of mice and <10% for 80% of primates. These studies strongly suggest that the N-propionylated polysialic acid-rPorB conjugate is an excellent vaccine candidate for human use.

L25 ANSWER 8 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1997:283005 BIOSIS
DOCUMENT NUMBER: PREV199799582208
TITLE: Preclinical studies on a novel trivalent meningococcal conjugate vaccine in nonhuman primates.
AUTHOR(S): Fusco, P. C.; Blake, M. S.; Huang, C.-H.; **Tai, J. Y.**; **Michon, F.**
CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD USA
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1997) Vol. 97, No. 0, pp. 252.
Meeting Info.: 97th General Meeting of the American Society for Microbiology Miami Beach, Florida, USA May 4-8, 1997
ISSN: 1060-2011.
DOCUMENT TYPE: Conference; Abstract; Conference

LANGUAGE: English

L25 ANSWER 9 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1997:283004 BIOSIS
DOCUMENT NUMBER: PREV199799582207
TITLE: Characterization of bactericidal activity elicited by a novel group B meningococcal polysaccharide/class 3 porin conjugate vaccine in nonhuman primates.
AUTHOR(S): Farley, E. K.; Fusco, P. C.; Badger, C. V.; **Tai, J. Y.; Michon, F.**
CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD USA
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1997) Vol. 97, No. 0, pp. 252.
Meeting Info.: 97th General Meeting of the American Society for Microbiology Miami Beach, Florida, USA May 4-8, 1997
ISSN: 1060-2011.
DOCUMENT TYPE: Conference; Abstract; Conference
LANGUAGE: English

L25 ANSWER 10 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1997:282997 BIOSIS
DOCUMENT NUMBER: PREV199799582200
TITLE: Preclinical studies on combination conjugate vaccines against multiple serotypes of group B streptococci.
AUTHOR(S): Laude-Sharp, M.; Fusco, P. C.; D'Ambra, A. J.; Long-Rowe, K.; Blake, M. S.; **Tai, J. Y.; Michon, F.**
CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD USA
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1997) Vol. 97, No. 0, pp. 251.
Meeting Info.: 97th General Meeting of the American Society for Microbiology Miami Beach, Florida, USA May 4-8, 1997
ISSN: 1060-2011.
DOCUMENT TYPE: Conference; Abstract
LANGUAGE: English

L25 ANSWER 11 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1997:282998 BIOSIS
DOCUMENT NUMBER: PREV199799582201
TITLE: Preclinical studies in mice on combination conjugate vaccines against pneumococcal otitis media.
AUTHOR(S): Fusco, P. C.; D'Ambra, A. J.; Huang, C.-H.; Uitz, C.; Moore, S.; Perry, J. W.; **Tai, J. Y.; Michon, F.**
CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD USA

SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1997) Vol. 97, No. 0, pp. 251.
Meeting Info.: 97th General Meeting of the American Society for Microbiology Miami Beach, Florida, USA May 4-8, 1997
ISSN: 1060-2011.
DOCUMENT TYPE: Conference; Abstract
LANGUAGE: English

L25 ANSWER 12 OF 23 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1997-099925 [09] WPIDS
DOC. NO. CPI: C1997-031905
TITLE: Depolymerising Group B Streptococcus type II and type III polysaccharide(s) - to produce fragments used in vaccines to immunise pregnant women and neonate(s) against GBS Type II or III infection.
DERWENT CLASS: B04
INVENTOR(S): CATHERINE, D; JOSEPH, Y T; **MICHON, F**; JOSEPH, Y; DONG, C; **MICHON, F L**; **TAI, J Y**; UITZ, C
PATENT ASSIGNEE(S): (NAVA-N) NORTH AMERICAN VACCINE INC
COUNTRY COUNT: 71
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9640795	A1	19961219	(199709)*	EN	44
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
W: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN					
ZA 9604822	A	19970226	(199714)		43
AU 9660953	A	19961230	(199716)		
EP 830380	A1	19980325	(199816)	EN	
R: AT BE CH DE DK ES FI FR GB IE IT LI LU NL SE					
NO 9705546	A	19980206	(199817)		
HU 9900919	A2	19990628	(199931)		
AU 706479	B	19990617	(199935)		
JP 11507964	W	19990713	(199938)		38

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9640795	A1	WO 1996-US9294	19960606
ZA 9604822	A	ZA 1996-4822	19960607
AU 9660953	A	AU 1996-60953	19960606

Searcher : Shears 308-4994

EP 830380	A1	EP 1996-918253	19960606
		WO 1996-US9294	19960606
NO 9705546	A	WO 1996-US9294	19960606
		NO 1997-5546	19971202
HU 9900919	A2	WO 1996-US9294	19960606
		HU 1999-919	19960606
AU 706479	B	AU 1996-60953	19960606
JP 11507964	W	WO 1996-US9294	19960606
		JP 1997-501648	19960606

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9660953	A	Based on	WO 9640795
EP 830380	A1	Based on	WO 9640795
HU 9900919	A2	Based on	WO 9640795
AU 706479	B	Previous Publ.	AU 9660953
		Based on	WO 9640795
JP 11507964	W	Based on	WO 9640795

PRIORITY APPLN. INFO: US 1995-481883 19950607
AN 1997-099925 [09] WPIDS
AB WO 9640795 A UPAB: 19970228

Process for depolymerising Group B Streptococcus (GBS) type II and type III polysaccharides to produce fragments having a 2,5-anhydro-D-mannose reducing-end structure of formula (I) comprises: (a) providing a GBS type II or III polysaccharide to be depolymerised and reacting it in an aq. medium with a base to form a partially de-N-acetylated polysaccharide prod.; (b) depolymerising the de-N-acetylated prod. with a nitrosation agent to form the GBS type II or III fragments, and (c) recovering the fragments. R1 = H; R2 = sialylated heptasaccharide repeating units of formula (>)-G1-(1=>3)-G2-(1=>4)-G3-(1=>3)-G4-(1=>2)-G5 (i); and n = 5-50 for type II; and R1 = sialylated pentasaccharide repeating-units of formula (ii); n = 5-50; and R2 = disaccharide alphaNeuAc-(2=>3)-beta-D-Galp-(1=>) for type III. G1 = beta-D-GlcpNAc; G2 = a gp. of formula (iii); G3, G4 = beta-D-Glcp; G5 = a gp. of formula (iv). Also claimed are (a) a GBS type II or type III polysaccharide fragment prepd. as above; (b) a conjugate mol. comprising at least 1 polysaccharide fragment of type II or type III covalently bound to a protein, where the conjugate mol. is of formula (II); (ii) a vaccine compsn. comprising conjugate mols. of formula (II); (d) an immune serum comprising antibodies raised in an animal immunised with the conjugate as above; (e) an immunoassay reagent which comprises a GBS type II or III polysaccharide fragment prepd. as above, immobilised on a solid support, and (f) a method of sepg. GBS type II or III antibodies from serum, which comprises immobilising a polysaccharide fragment prepd. as above, combining the solid support with bound

polysaccharide with serum under conditions to allow binding of GBS type II or III antibodies to the bound polysaccharide fragment, and sepg. the remaining serum from the solid support.

USE - The vaccine can be used to immunise pregnant women and neonates against GBS type II or II infection (claimed). The polysaccharide fragments may also be used in sepn. chemistry.
Dwg.0/6

L25 ANSWER 13 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1996:259963 BIOSIS
DOCUMENT NUMBER: PREV199698816092
TITLE: An opsonophagocytosis assay using HL-60 cells to measure potency of group B streptococcal (GBS) and pneumococcal conjugate vaccines.
AUTHOR(S): Perry, J. W.; Fusco, P. C.; **Michon, F.**; **Tai, J. Y.**
CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD USA
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1996) Vol. 96, No. 0, pp. 277.
Meeting Info.: 96th General Meeting of the American Society for Microbiology New Orleans, Louisiana, USA May 19-23, 1996
ISSN: 1060-2011.
DOCUMENT TYPE: Conference
LANGUAGE: English

L25 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 7
ACCESSION NUMBER: 1996:25269 CAPLUS
DOCUMENT NUMBER: 124:66569
TITLE: **Group A streptococcal** polysaccharide immunogenic compositions and methods
INVENTOR(S): Blake, Milan S.; Zabriskie, John B.; **Tai, Joseph Y.**; **Michon, Francis**
PATENT ASSIGNEE(S): Rockefeller University, USA; North American Vaccine, Inc.
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9528960	A1	19951102	WO 1995-US4973	19950420

W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU,

Searcher : Shears 308-4994

LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

US 5866135	A	19990202	US 1994-231229	19940421
CA 2188284	AA	19951102	CA 1995-2188284	19950420
AU 9522967	A1	19951116	AU 1995-22967	19950420
AU 709797	B2	19990909		
EP 754055	A1	19970122	EP 1995-916479	19950420
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1149835	A	19970514	CN 1995-193413	19950420
BR 9507400	A	19971007	BR 1995-7400	19950420
JP 09512276	T2	19971209	JP 1995-527802	19950420
NO 9604413	A	19961217	NO 1996-4413	19961017
FI 9604189	A	19961218	FI 1996-4189	19961018
PRIORITY APPLN. INFO.:			US 1994-231229	19940421
			WO 1995-US4973	19950420

AB This invention provides a novel immunogenic compn. and vaccine, processes for producing them and methods for immunization against infectious and disease caused by **group A Streptococci**. The compns. include **group A streptococcal** polysaccharide covalently linked to protein or liposomes to form immunogenic conjugates. The method of immunization for this invention comprises administering to an individual an immunogenic amt. of group A polysaccharide. The group A polysaccharide may be administered as a vaccine either on its own, conjugated to proteins or conjugated to liposomes. Addnl., the group A polysaccharides may be assocd. with an adjuvant. This invention is particularly useful for providing both active and passive immunogenic protection for those populations most at risk of contracting **group A Streptococcal** infections and disease namely adults, pregnant women and in particular infants and children.

L25 ANSWER 15 OF 23 TOXLIT

ACCESSION NUMBER:	1996:31626 TOXLIT
DOCUMENT NUMBER:	CA-124-066569C
TITLE:	**Group A streptococcal** polysaccharide immunogenic compositions and methods.
AUTHOR:	Blake MS; Zabriskie JB; **Tai JY; Michon F**
SOURCE:	(1995). PCT Int. Appl. PATENT NO. 95 28960 11/02/95 (Rockefeller University).
PUB. COUNTRY:	United States
DOCUMENT TYPE:	Patent
FILE SEGMENT:	CA
LANGUAGE:	English

Searcher : Shears 308-4994

OTHER SOURCE: CA 124:66569
ENTRY MONTH: 199602
AB This invention provides a novel immunogenic compn. and vaccine, processes for producing them and methods for immunization against infectious and disease caused by **group A Streptococci**. The compns. include **group A streptococcal** polysaccharide covalently linked to protein or liposomes to form immunogenic conjugates. The method of immunization for this invention comprises administering to an individual an immunogenic amt. of group A polysaccharide. The group A polysaccharide may be administered as a vaccine either on its own, conjugated to proteins or conjugated to liposomes. Addnl., the group A polysaccharides may be assocd. with an adjuvant. This invention is particularly useful for providing both active and passive immunogenic protection for those populations most at risk of contracting **group A Streptococcal** infections and disease namely adults, pregnant women and in particular infants and children.

L25 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 8
ACCESSION NUMBER: 1995:475042 CAPLUS
DOCUMENT NUMBER: 122:237339
TITLE: **Group A streptococcus**-liposome ELISA antibody titers to group A polysaccharide and opsonophagocytic capabilities of the antibodies
AUTHOR(S): Salvadori, L. G.; Blake, M. S.; McCarty, M.; **Tai, J. Y.**; Zabriskie, J. B.
CORPORATE SOURCE: Laboratory of Clinical Microbiology/Immunology, Rockefeller University, New York, NY, 10021, USA
SOURCE: J. Infect. Dis. (1995), 171(3), 593-600
CODEN: JIDIAQ; ISSN: 0022-1899
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Antibodies reactive with **group A streptococci** (GAS) carbohydrate were studied by ELISA and in an indirect bactericidal assay. The ELISA used GAS carbohydrate covalently bound to phosphatidylethanolamine incorporated into liposomes so that both pptg. and nonpptg. antibodies were measured. Sera from children from different geog. areas exhibited marked differences in levels of anti-GAS carbohydrate antibody, which increased with age. The antibodies were predominantly of IgG. In bactericidal assays, most of these sera promoted phagocytosis of several type-specific M-pos. strains. Opsonization was also related to serum levels of anti-GAS carbohydrate antibodies. These opsonizing antibodies were depleted from the serum by absorption of the sera on an N-acetyl-D-glucosamine affinity column. Antibody eluted from this column could partially restore opsonization of GAS Anti-GAS carbohydrate antibodies play a major role in these

opsonophagocytosis assays.

L25 ANSWER 17 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1995:525931 BIOSIS
DOCUMENT NUMBER: PREV199598540231
TITLE: Antibody-dependent, complement-mediated bactericidal activity elicited by group B meningococcal conjugate vaccines in mice and nonhuman primates.
AUTHOR(S): **Tai, Joseph Y.**; **Michon, Francis**; Fusco, Peter C.
CORPORATE SOURCE: North American Vaccine, Inc., Beltsville, MD USA
SOURCE: Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy, (1995) Vol. 35, No. 0, pp. 159.
Meeting Info.: 35th Interscience Conference on Antimicrobial Agents and Chemotherapy San Francisco, California, USA September 17-20, 1995
DOCUMENT TYPE: Conference
LANGUAGE: English

L25 ANSWER 18 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS DUPLICATE 9
ACCESSION NUMBER: 1994:330897 BIOSIS
DOCUMENT NUMBER: PREV199497343897
TITLE: Further immunogenicity studies on conjugates of types II and III capsular polysaccharides of Group B streptococcus.
AUTHOR(S): **Michon, F.**; D'Ambra, A. J.; Dong, C.; Lohmar, P.; Fusco, P.; Enriquez, A.; **Tai, J.**
CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD USA
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1994) Vol. 94, No. 0, pp. 147.
Meeting Info.: 94th General Meeting of the American Society for Microbiology Las Vegas, Nevada, USA May 23-27, 1994
ISSN: 1060-2011.
DOCUMENT TYPE: Conference
LANGUAGE: English

L25 ANSWER 19 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1993:357678 BIOSIS
DOCUMENT NUMBER: PREV199345041103
TITLE: Structure activity studies on Neisseria meningitidis group C polysaccharide-protein conjugate vaccines: The effect of O-acetylation on the nature of the antibody response.
AUTHOR(S): Hronowski, L.; Di, J.; Pullen, J.; Rohrbaugh, J.; Huang, C.-H; **Michon, F.**; Mates, S.; **Tai, J.**

Searcher : Shears 308-4994

CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD USA
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1993) Vol. 93, No. 0, pp. 155.
Meeting Info.: 93rd General Meeting of the American Society for Microbiology Atlanta, Georgia, USA May 16-20, 1993
ISSN: 1060-2011.
DOCUMENT TYPE: Conference
LANGUAGE: English

L25 ANSWER 20 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1994:426186 BIOSIS
DOCUMENT NUMBER: PREV199497439186
TITLE: Development of a monovalent conjugate vaccine against Neisseria meningitidis Group A and the divalent vaccine against Groups A and C.
AUTHOR(S): Hronowski, L. J. J.; **Michon, F.**; Huang, C.-H.; Pullen, J.; **Tai, J.**
CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD USA
SOURCE: Program and Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy, (1993) Vol. 33, No. 0, pp. 151.
Meeting Info.: 33rd Interscience Conference on Antimicrobial Agents and Chemotherapy New Orleans, Louisiana, USA October 17-20, 1993
ISSN: 0733-6373.
DOCUMENT TYPE: Conference
LANGUAGE: English

L25 ANSWER 21 OF 23 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1992:538557 BIOSIS
DOCUMENT NUMBER: BR43:124257
TITLE: COMPARISON OF THE IMMUNOGENICITY OF NEISSERIA-MENINGITIDIS GROUP C POLYSACCHARIDE-PROTEIN CONJUGATE VACCINES.
AUTHOR(S): PULLEN J; **MICHON F**; DEMUYS J; HUANG C; HOSKIN S; JENNINGS H; **TAI J**
CORPORATE SOURCE: NORTH AMERICAN VACCINE INC., BELTSVILLE, MD., USA.
SOURCE: 32ND INTERSCIENCE CONFERENCE ON ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, ANAHEIM, CALIFORNIA, USA, OCTOBER 11-14, 1992. PROGRAM ABSTR INTERSCI CONF ANTIMICROB AGENTS CHEMOTHER, (1992) 32 (0), 325.
CODEN: POCHES.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L25 ANSWER 22 OF 23 CONFSCI COPYRIGHT 2000 CSA